Architectures of development and US housing aid in Cold War Latin America. Bolivia in the trajectory of inter-American housing operations

Submitted for the Degree of
PhD / School of Architecture / Doctor of Philosophy
At the Royal College of Art

2023

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Architectures of development and US housing aid in Cold War Latin America

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Submitted in partial fulfilment of the requirements of the degree of Doctor of Philosophy in the School of Architecture

Royal College of Art

Word count: 74,825 — November 2023

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Francisco Javier Quintana Osorio
November 30, 2023

Abstract

Architectures of development and US housing aid in Cold War Latin America
Bolivia in the trajectory
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Francisco Javier Quintana

This thesis examines the architectures of development programmes implemented by the 'first world' —with the US at the forefront— in Latin America during the Cold War. It explores the transnational trajectories and contact zones that shaped architectural ideas, underscoring the complexities of inter-American engagement. The research shows the impact of housing aid projects on Latin America's built environment and local institutions, with Bolivia as a central case study. This dissertation is structured into three development periods.

The first phase begins with the Point Four programme, announced in 1949 by US President Harry S. Truman, aimed at collaborating with 'underdeveloped' regions within an anti-communist framework. This part examines the 'aided self-help housing' strategy as a form of US international technical assistance to encourage development. It traces the progression of a low-cost housing model from early essays in Puerto Rico, spreading across Latin America in the 1950s through US Operations Missions. Chile is examined as a link connecting diverse trajectories. Also, the establishment of the Inter-American Housing Centre (CINVA) in 1951 is highlighted as a significant regional platform for architects to exchange housing ideas within an interdisciplinary environment, fostering South-South collaborations. It concludes by analysing Charles Abrams' United Nations housing consultancy in Bolivia, which aimed to replace previous

local programmes with economic austerity measures and to extend homeownership among the lowest-income people.

The second period addresses the 1960s Alliance for Progress, initiated by US President John F. Kennedy after the 1959 Cuban Revolution, to support Latin American development and counter communism. It explores how economic aid funded 'satellite cities' and 'neighbourhood units', targeting not only low-income populations but also the middle socio-economic strata. Projects financed by the Inter-American Development Bank and the US Agency for International Development illustrate an inter-American trajectory of architectural and urban design ideas, alongside institutional interventions. Additionally, the investments of US companies, such as World Homes, in Latin America are discussed, highlighting the North-South dynamics in their local subsidiaries. Bolivia is presented as a case study to demonstrate a 'bipolar' urban growth driven by these international institutions and private firms, contrasting developments in El Alto's highlands for lower-income residents with those in the La Paz valley for middle-income groups.

The final part explores the continuation of US international housing aid during Robert McNamara's tenure as World Bank President from 1968 to 1981. This third part shows McNamara's transition from an 'armed war' to a 'war on absolute poverty', focusing on housing in 'third world' cities across Latin America, Africa, and Asia. It explores updated strategies of aided self-help housing through Sites and Services and Slum Upgrading programmes implemented in 35 countries. Through Bolivia, it explores interactions between foreign experts and local architects in project implementation, with case studies in El Alto and La Paz illustrating the translation of ideas into practice.

The research draws on institutional, national, and personal archives from the US, Bolivia, Colombia, and Chile, providing qualitative and quantitative data on housing projects. This includes archival records of memoranda, letters, and contracts between foreign institutions and local authorities. These documents are confronted with personal files and recent interviews with architects and officials, offering insights into these housing operations' reception, contestation, negotiation, and adaptation.

This thesis aims to contribute to existing research in architectural history concerning western Cold War urbanisations in the 'third world.' It argues that a closer examination of Bolivia's relationship with the US and international institutions can enhance our understanding of Latin America's post-war urban landscape. By analysing the impact on architecture and the built environment in Bolivia, this study addresses the crossroads of development and housing, presenting a nuanced perspective that transcends the traditional 'North-South' narrative, revealing more complex layers of inter-American engagement.

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Acknowledgements

This research, initiated in London in September 2019, took an unforeseen turn with the onset of the global COVID lockdown in March 2020. This shift to a remote working environment enabled outreach to numerous institutions and individuals across the globe. Through the generosity and support of many, this study has benefitted from the digitization of hundreds of documents from archives in the US, Colombia, and Greece. Furthermore, interviews with professionals in Bolivia and Chile were conducted via video calls, and online seminars with architectural historians in the UK, the Netherlands, and Argentina were successfully organized. These adaptations transformed the typically solitary PhD journey into a collective and collaborative online experience. I extend my heartfelt gratitude to my family, especially Stephannie Fell, for their enduring support and companionship during these challenging times of confinement and intensive work.

At the Royal College of Art, my profound thanks go to my supervisors, Ines Weizman and Dubravka Sekulić, for their insightful feedback and dedicated support, both academically and personally. Our meeting in London was unexpected and has greatly enriched my experience. Gratitude is also owed to the university's faculty, including Adrian Lahoud, Rosa Ainley, Mark Campbell, Sam Jacoby, Adam Kaasa, Thandi Loewenson, and Godofredo Pereira who have contributed significantly at various stages of my research. Special appreciation is extended to Luiza Tatarska for friendly and efficient assistance. Additionally, I am indebted to my fellow PhD students for their invaluable conversations and diverse forms of support over these four years.

The research involved extensive archival work, overcoming the obstacles presented by COVID-19 closures and geographical distance. The assistance of archivists and their teams was crucial in making these resources accessible. I am indebted to Bertha

F. Wilson, archivist at the World Bank Group Archives, for her efforts in digitizing a substantial number of documents, now available for online access. My gratitude extends to Juan Manuel Gualteros and Gabriel Escalante at the Archivo Central e Histórico de la Universidad Nacional de Colombia for providing access to the Centro Interamericano de la Vivienda (CINVA) collection, with a special note of gratitude to Katerinne Carrillo for her meticulous digitization work. Appreciation is also owed to Mary Nelson at the Special Collections and University Archives, Wichita State University Libraries, Marc Brodsky at the Special Collections and University Archives, Virginia Tech, and Giota Pavlidou at the Constantinos A. Doxiadis Archives. Additionally, I am grateful to the staff of the US National Archives and Records Administration, the Division of Rare and Manuscript Collections at Cornell University Library, the Documentation Centre of the Ministry of Housing and Urbanism in Chile, and the Archive of the Ministry of Public Works, Services and Housing in Bolivia for their invaluable support.

This research was further enriched through various activities, including organizing seminars, writing articles, curating an exhibition, recording podcasts, and teaching courses. Bárbara Salazar played a vital role in these initiatives and in numerous discussions about the research project. Carlos Díaz consistently offered invaluable support across a variety of tasks. I am thankful for the thoughtful lectures provided in the Cold War Cities seminars by Pedro Alonso, Adrián Gorelik, Jorge Francisco Liernur, Alejandra Monti, Dubravka Sekulić, Łukasz Stanek, and Ines Weizman, and for the insightful podcasts recorded by Dalal Musaed Alsayer, Emanuel Giannotti, and Łukasz Stanek. The 'Other' Cold War Cities exhibition came to fruition thanks to Bárbara Salazar, Gabriel Fuentes, Anton zu Knyphausen, prior work with Melinka Bier, and the collaboration of Carlos Díaz, Javier Roa, and Felipe Pizarro. Special thanks are owed to all the students from the Ciudades de la Guerra Fría research studio and courses conducted in 2020, 2021, and 2023 at the School of Architecture, and the Master in Architecture and Master in Urban Project programmes at the Pontificia Universidad Católica de Chile, including Lorenza Altamirano, Michael Arriagada, Jurgen Basay, Melinka Bier, Josefina Birchmeier, Franz-Josef Bohm, Antonia Cabezas, María José Cisternas, Carlos Díaz, Valentina Flaño, Florencia Galecio, Fabiola González, Juan Gubbins, Catalina Guerra, María Antonia Guzmán, Camila Hernández, Luciano Hernández, Felipe Ibacache, Layla Jorquera, Carmen Luz Hurtado, Francisco Javier Kattan, María Lienlaf, Santiago Molina, Diego Muñoz, Domingo Nicholls, José Noroña, María Ignacia Ovando, Alvaro Pávez, Mauricio Pérez, Felipe Pizarro, Francisca Pulido, Francisca Riffo, Javier Roa, Matilde Rodríguez-Cano, Martín Saumann, Sofía Sepúlveda, Francisco Valdés, Matías Valenzuela, Benito Vivallo, and Hao-Ming Yu.

Over the past four years, the research has benefitted immensely from the support and insights of numerous academics and friends. The initial observations by Neil Brenner and Elke Schlack were instrumental in clarifying and enriching the early ideas, while constructive criticisms, valuable contributions, necessary corrections, and insightful conversations with Alvaro Arancibia, Felipe Aravena, Luis Eduardo Bresciani L., Umberto Bonomo, Armando Caroca, Alejandra Celedón, Andra Chastain, Camila Cociña, Pedro Correa, Diane Davis, Emilio De la Cerda, Francisco Díaz, Diego González, Lucía Galaretto, Emanuel Giannotti, Richard Harris, Miguel Lawner, Antonio Lipthay, Rahul Mehrotra, José Manuel Monge, Alejandra Monti, Valeria Muñoz Biggs, Diego Osorio, Sebastián Osorio, Paula Orta, Nicole Pumarino, Fernando Pérez Oyarzun, Sol Pérez-Martínez, Jorge Vicente Ramírez Nieto, Cristián Robertson, Margarita Roa, José Rosas, Eduardo Rojas, Jorge Silva, Felicity Scott, Rodrigo Sepúlveda, Nicolás Stutzin, Horacio Torrent, Nicolás Valenzuela, and Felipe Vera significantly enriched the study.

Significant and consistent support also came from academics and professionals in Bolivia, who generously shared their time, information, documents, and insights. They assisted in confirming data, establishing contacts, sharing photographs, and providing critical readings and feedback on drafts of the thesis. Special gratitude is extended to Ruddy Quispe for his substantial collaboration from La Paz and El Alto, to Zenobio Mollo for sharing his information, and to Samuel Hilari, Guido Alejo Mamani, Luis M. Sierra, Juan Ramón Rivera, and Carlos Villagómez for their insightful comments and contributions to the research. Further thanks go to Ranulfo Balderrama Mendoza, Juan Carlos Barrientos Mercado, Carlos Calvimontes Rojas, Jaime Murillo Palacios, and Jorge Rivera Salazar for sharing their personal experiences. My sincere appreciation goes especially to academic Alvaro Cuadros for his pivotal research on Bolivia's architecture and urban history, and particularly for his insightful comments and thoughtful observations on the thesis. The Bolivian journey that began with this doctoral research is one I am excited to continue exploring.

This study was realized thanks to the support of the Agencia Nacional de Investigación y Desarrollo, through its scholarship programme for doctoral studies abroad, Becas Chile. I am also grateful for the institutional support provided by the Pontificia Universidad Católica de Chile during these four years of research.

List of Abbreviations

AID	Agency for International Development
APHA	American Public Health Association
BANVI	Banco de la Vivienda de Bolivia [Housing Bank]
BIRF	Banco Internacional de Reconstrucción y Fomento [IBRD International Bank for Reconstruction and Development]
BUR	Banco de Urbanización y Rehabilitación [Urbanisation and Rehabilitation Bank]
BVP	Banco de la Vivienda del Perú [Housing Bank of Peru]
CAP	Compañía de Acero del Pacífico [Pacific Steel Company]
CBF	Corporación Boliviana de Fomento [Bolivian Development Corporation]
CChC	Cámara Chilena de la Construcción [Chilean Chamber of Construction]
CCV	Centro Científico de la Vivienda [Scientific Centre for Housing]
CIA	Central Intelligence Agency
CIDU	Centro Interdisciplinario de Desarrollo Urbano [Interdisciplinary Urban Development Centre]
CINVA	Centro Interamericano de la Vivienda [Inter-American Housing Centre]
CNV	Corporación Nacional de Vivienda del Perú [National Housing Corporation]
CONAVI	Consejo Nacional de la Vivienda de Bolivia [National Housing Council]
CORMU	Corporación de Mejoramiento Urbano de Chile [Urban Improvement Corporation]

CORVI	Corporación de la Vivienda de Chile [Housing Corporation]
DLF	Development Loan Fund
FF	Ford Foundation
FHA	Federal Housing Administration
FOA	Foreign Operations Administration
FUNDASAL	Fundación Salvadoreña de Desarrollo y Vivienda Mínima [Salvadoran Development and Minimum Housing Foundation]
HAM	Honorable Alcaldía Municipal de La Paz [Honourable Mayor's Office of La Paz]
HHFA	Housing and Home Finance Agency
HIG	Housing Investment Guarantees
HTCP	Housing and Town and Country Planning
IBEC	International Basic Economy Corporation
ICA	International Cooperation Administration
ICT	Instituto de Crédito Territorial [Institute of Territorial Credit]
IDA	International Development Association
IDB	Inter-American Development Bank
IIAA	Institute of Inter-American Affairs
IHS	International Housing Service
IMF	International Monetary Fund
INV	Instituto Nacional de Vivienda de Perú [National Housing Institute]
INVI	Instituto Nacional de Vivienda de Bolivia [National Housing Institute]
INVU	Instituto Nacional de Vivienda y Urbanismo de Costa Rica [National Institute of Housing and Urbanism]
MNR	Movimiento Nacionalista Revolucionario [Nationalist Revolutionary Movement]

OAS	Organization of American States
PAU	Pan-American Union
PIAPUR	Programa Interamericano de Urbanismo y Regionalismo [Inter-American Urban and Regional Planning Programme]
PL480	Public Law 480
PUC	Pontificia Universidad Católica de Chile
MIT	Massachusetts Institute of Technology
SPTF	Social Progress Trust Fund
TCA	Technical Cooperation Administration
TVA	Tennessee Valley Authority
UN	United Nations
UNRRA	United Nations Relief and Rehabilitation Administration
UPD	Urban Projects Department
US	United States of America
USAID	United States Agency for International Development
USDP	Urban Settlement Design in Developing Countries
USHA	United States National Housing Agency
USOM	United States Operations Mission

Note

In this thesis, the terms 'America' and 'Americans' will be employed to denote the entire continental region and its inhabitants, respectively, rather than being used exclusively to represent the US or its citizens.

All monetary values are denominated in US dollars unless otherwise specified.

Introduction

Inter-American trajectories of housing ideas during the Cold War

In January 1979, a flight from the US east coast city of Boston landed in El Alto, Bolivia, a desert plateau in South America. Onboard was a team of architects, led by a Massachusetts Institute of Technology (MIT) scholar. Their mission entailed a fourteen-day collaborative effort with local experts to design an aided self-help housing scheme for low-income people. This effort was not only intended to mitigate Bolivia's acute housing crisis, but also to create a replicable model for similar initiatives. The project faced numerous challenges, including architectural, urban, cultural, and climatic factors. It needed to cater to a diverse demographic, encompassing urban and rural residents, and individuals of Aymara and Quechua descent. Situated adjacent to El Alto airport, near La Paz, the capital, the site posed significant geographical difficulties. Initially a sparsely populated area, it would later become the world's highest city at 4,000 metres above sea level and outgrow La Paz in population. How did an MIT academic come to lead a housing project in remote El Alto?

A brief explanation of the migration of ideas and personnel from North to South America could be attributed to a World Bank assignment to the MIT academic. The Bank had undertaken its first aided self-help housing project in Senegal, Africa, in 1972. Its then-president, Robert McNamara —a former US Secretary of Defence during the Vietnam War— had introduced affordable urban housing into the Bank's international collaboration portfolio. In a sense, McNamara marked a shift from an 'armed war' to a 'war on poverty' approach, aligning with the prevailing development narratives in the geopolitical context of the Cold War. Among the World Bank's initiatives in developing countries were those in Bolivia, established during McNamara's

1976 meeting in La Paz with General Hugo Banzer, the country's dictator from 1971 to 1978. The El Alto housing project, named Río Seco [Dry River], was a product of this North-South agenda.

However, this explanation, while accurate, oversimplifies the complexity of the situation. What might appear as a straightforward North-to-South trajectory of a project —funded from Washington DC, designed in the Boston area, and constructed in El Alto— conceals a rich, underexplored inter-American exchange of affordable housing concepts. To better understand this knowledge exchange, it is necessary to examine the 'crossed gazes' or 'back-and-forth journeys' between the North and South, as historian Adrián Gorelik proposes for analysing the US-Latin American relationship during the twentieth century.[1] Furthermore, at different junctures of this idea circulation, it becomes possible to recognize a variety of 'contact zones' between cultures, drawing on the concepts of Mary Louise Pratt.[2] Within these encounters, characterized by their asymmetrical nature, an examination of the negotiations, adaptations, and resistances that took place is feasible. This approach offers a deeper comprehension and enriches the historical account of housing projects like Río Seco in El Alto, Bolivia.

A more nuanced response to the initial question recognizes that the housing project was, in essence, a collaborative effort drawn by three hands. The inception of ideas commenced with local expertise, embodied in the designs of a young Bolivian government architect. This was subsequently integrated with global insights by the Urban Design Settlement group (USDP), headed by the MIT academic. The designs underwent critiques and modifications by World Bank architects to align with institutional standards and reflect past experiences. Ultimately, the project was adapted and realized in El Alto by local architects. The project's inception, design, development, and implementation were inevitably marked by discussions, discrepancies, adaptations, and agreements among the diverse stakeholders. Also, these actors extended the trajectory of ideas converging in the Río Seco project to strategies presented at the UN Habitat I congress in Canada in 1976, experiences gained in Colombia through the Inter-American Housing Centre (CINVA), insights from organizations like FUNDASAL in El Salvador, and academic inputs from institutions such as MIT, among others.

1 Adrián Gorelik, 'Miradas cruzadas: El viaje latinoamericano del planning norteamericano', *Bifurcaciones: revista de estudios culturales urbanos*, no. 18 (2014); Adrián Gorelik, 'Pan-American Routes: A Continental Planning Journey between Reformism and the Cultural Cold War', *Planning Perspectives* 32, no. 1 (January 2017): 47–66.
2 Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation* (London: Routledge, 1992).

The Río Seco housing project will be addressed only in the final sections of this thesis. To comprehend the architectural and urban design concepts pursued in this project, alongside the development discourses of the era which it embodied, requires tracing an extensive and multi-directional path of ideas and knowledge about affordable housing across the Americas. This trajectory can be traced back to Puerto Rico in the late 1930s and, from the 1950s onwards, through Latin America within the framework of the Cold War. During this period, the US extended its geopolitical influence through projects of this nature.

This thesis examines the architectures of development programmes implemented in Latin America by the so-called 'first world', with the US at the forefront, during the Cold War. It specifically focuses on housing projects in developing countries, which sought to foster economic growth and modernization through technical assistance and international aid policies. The research aims to broaden the understanding of bilateral agreements and trace the transnational paths and contact zones of housing architectural ideas across North, Central, and South America. The specific case of Bolivia, with an emphasis on La Paz and El Alto, is examined to understand the trajectory and impact of these inter-American initiatives on the built environment and local institutions. The thesis investigates into the architectures of housing aid urbanizations by studying three development phases within the geopolitical context of the Cold War. Across each of these phases, the relationship be-

tween architecture and development is explored through the trajectories of housing experts in Latin America, and how their housing ideas materialized the prevailing development discourses.

The thesis is structured into three distinct parts, each beginning with an exploration of the predominant development discourses of the era, contextualized within the Cold War framework. Each part then progresses to an analysis of key institutions and experts that supported housing projects during the period under study. A subsequent examination of transnational idea trajectories sheds light on the dissemination and adaptation of knowledge across various contexts. Specific examples, such as research centres like CINVA, US private firms like World Homes, and international entities like the World Bank, elucidate these trajectories and their operational methodologies in the Cold War environment. Each part concludes by assessing the impact of these development discourses on affordable housing construction in Bolivia. This approach juxtaposes general histories, sourced from international archives, with micro-histories, incorporating archival material and local narratives, in a Latin American context that has been relatively unexplored in architectural history research.

The initial period of the thesis commences with President Harry S. Truman's 1949 inaugural address, announcing the Point Four programme. This initiative represented a collaborative effort between the US and 'underdeveloped' nations worldwide, prompted by an anti-communist rhetoric. Its objective was poverty reduction through development driven by US knowledge and technological advances. The first part of the dissertation delves into the 'aided self-help' strategy and low-cost construction as forms of international technical assistance to address housing shortages. It emphasizes the reduction of public expenditure and the promotion of homeownership. The narrative traces the evolution of ideas from early 'land and utilities' housing programmes in Puerto Rico

in the late 1930s, subsequently propagated internationally in the 1950s by US housing experts such as Jacob Crane of the US Housing and Home Finance Agency (HHFA), and supported by figures like Ernest Weissmann from the United Nations (UN). These experts facilitated housing missions across the 'third world', encompassing cities in Latin America, Africa, and Asia.

This section presents an inter-American trajectory of aided self-help housing ideas, supplementing and broadening the general histories authored by Richard Harris, Ijlal Muzaffar, Adrián Gorelik, and Jorge Francisco Liernur.[3] It builds on Andrea Renner's detailed focus on early US technical assistance housing missions in Suriname and the Caribbean islands, followed by experiences in Guatemala.[4] Helen Gyger's work on Peru is crucial to understanding the specific contributions of architects like John Turner in this extensive and varied trajectory of aided self-help housing ideas in the late 1950s.[5] The research complements and elaborates on the findings of architectural historian Emanuel Giannotti on Chile, which are pivotal for comprehending the inception of aided self-help housing concepts in South America's southern region, facilitated by the US Office of Inter-American Affairs, during the early 1950s.[6]

The first segment of the dissertation delves deeper into the role of CINVA, established by the Organization of American States (OAS) in 1951. CINVA is depicted as a hub for Inter-American housing, where architects, engineers, social workers, economists, and lawyers, from various countries in the region converged to learn

3 Richard Harris, 'The Silence of the Experts: "Aided Self-Help Housing", 1939-1954', *Habitat International* 22, no. 2 (1998): 165–90; M. Ijlal Muzaffar, 'The Periphery within: Modern Architecture and the Making of the Third World' (Ph.D. Dissertation, Massachusetts Institute of Technology, 2007); Adrián Gorelik, *La ciudad latinoamericana: Una figura de la imaginación social del siglo XX* (Buenos Aires: Siglo XXI Editores, 2022); Jorge Francisco Liernur, 'Mutaciones de cancer a capricornio. La construcción del discurso occidental sobre la vivienda en territorios tropicales: de instrumento colonialista a factor de conflicto en la Guerra Fría', *Estudios del hábitat* 13, no. 1 (June 2015): 1–60.

4 Andrea Renner, 'Housing Diplomacy: US Housing Aid to Latin America, 1949-1973' (Ph.D. Dissertation, New York, Columbia University, 2011).

5 Helen Gyger, 'The Informal as a Project: Self-Help Housing in Peru, 1954-1986' (Ph.D. Dissertation, New York, Columbia University, 2013); Helen Gyger, *Improvised Cities: Architecture, Urbanization & Innovation in Peru* (Pittsburgh: University of Pittsburgh Press, 2019).

6 Emanuel Giannotti, 'Aided Self-Help Housing in Chile, 1952-1970' (EAUH Conference 2018, Rome, 2018).

about low-cost construction, community organization, and aided self-help housing strategies through an interdisciplinary lens. Despite being largely overlooked in traditional affordable housing narratives, CINVA has recently gained attention from researchers who have unearthed valuable insights from its public archive. These include educational programmes, idea dissemination, and its involvement in housing construction in Colombia. The works of Jorge Rivera, Martha Liliana Peña, Mark Healey, Alejandro Jaimes y Olavo Escorcia, among others, have shed light on this institution's history.[7] This thesis supplements their findings not only by examining CINVA's archives but also by exploring those of Virginia Tech, which hold records of CINVA's first director in Colombia, the Canadian-born US architect Leonard Currie, to grasp the early years of this regionally influential research centre. Additionally, the dissertation discusses South-South collaboration, highlighting experiences from Chile and Bolivia in connection with this institution.

The final part of this section focuses on the mission of Charles Abrams, a UN housing expert, in Bolivia. Abrams advocated for a 'roof-loan' scheme, promoting economic austerity within a new government housing programme and supporting urban expansion from La Paz to El Alto. Although the Bolivian President showed receptiveness to these ideas —which would have resonated with those of local architects trained at CINVA— Abrams' proposal was not implemented due to funding constraints. This situation changed in the subsequent 'development decade'. To contextualize narratives like Abrams', the thesis undertakes the challenge of tracing the institutional and legislative history of affordable housing in Bolivia from the 1950s to the 1970s. It places a particular emphasis on the influence of foreign

7 Jorge Rivera Páez, 'El CINVA: un modelo de cooperación técnica 1951 - 1972' (Master in History, Bogotá, Universidad Nacional de Colombia, 2002); Martha Liliana Peña Rodríguez, *El programa CINVA y la acción comunal. Construyendo ciudad a través de la participación comunitaria* (Bogotá: Universidad Nacional de Colombia, 2010); Mark Healey, 'Planning, Politics, and Praxis at Colombia's Interamerican Housing Lab, 1951 - 1966', in *Itineraries of Expertise. Science, Technology, and the Environment in Latin America's Long Cold War*, ed. Andra B. Chastain and Timothy W. Lorek (Pittsburgh: University of Pittsburgh Press, 2020), 199–216; Samuel Jaimes Botía, 'La vivienda en Bucaramanga 1948-1962. Una crítica a la modernidad en Colombia' (Ph.D. Dissertation, Barcelona, Universidad Politécnica de Cataluña, 2020); Olavo Escorcia-Oyola, *Centro Interamericano de Vivienda (Cinva), 1951-1972. Aportes a la investigación, al desarrollo de técnicas constructivas y otras contribuciones en Vivienda de Interés Social (VIS)* (Bogotá: Universidad Nacional de Colombia, 2022).

experts and international organizations on Bolivian policy and public administration. This involved a comprehensive review of multiple reports and documents, as well as utilizing specialized literature such as Alvaro Cuadros' book *La Paz* as a basic resource to understand the urban history of Bolivia's capital, particularly in relation to the diverse political-administrative landscapes of the Andean country.[8]

The second part of the dissertation examines the Alliance for Progress, an initiative inaugurated by US President John F. Kennedy in 1961. This programme aimed to bolster the development of Latin American countries and curb the spread of communism in the wake of the 1959 Cuban Revolution. It delves into how development theories, particularly those advocated by authors like W. W. Rostow, influenced the international development agenda by pushing for direct economic aid and reforms in Latin America. This aid was not limited to technical assistance but also encompassed direct funding aligned with comprehensive national development plans. This era is marked by the rise of satellite cities and neighbourhood units, which incorporated not only the lowest-income groups but also middle socio-economic strata into US housing aid policies. These projects were financed by newly established agencies like the US Agency for International Development (USAID) and the Inter-American Development Bank (IDB). The work of researcher Leandro Benmergui, who has extensively covered the Alliance for Progress through housing case studies in Argentina and Brazil, is relevant to this analysis.[9] Consequently, this research supplements these existing studies, placing Bolivia within the continental framework of housing development.

This section of the thesis examines case studies such as Ciudad Hatillo in Costa Rica, Ciudad Satélite de Ventanilla in Peru,

8 Alvaro Cuadros, *La Paz* (La Paz: Facultad de Arquitectura, Urbanismo y Artes, Universidad Mayor de San Andrés, 2002). Also: Paul van Lindert, 'Collective Consumption and the State in La Paz, Bolivia', *Boletín de Estudios Latinoamericanos y Del Caribe*, no. 41 (1986): 71–93.

9 Leandro Benmergui, 'Building the Alliance for Progress: Local and Transnational Encounters in a Low-Income Housing Program in Rio de Janeiro, 1962–67', in *Making Cities Global: The Transnational Turn in Urban History*, ed. A. K. Sandoval-Strausz and Nancy H. Kwak (Philadelphia: University of Pennsylvania Press, 2018), 71–97; Leandro Benmergui, 'Housing development: Housing policy, slums, and squatter settlements in Rio de Janeiro, Brazil and Buenos Aires, Argentina, 1948-1973' (Ph.D. Dissertation, College Park, University of Maryland, 2012); Leandro Benmergui, 'The Alliance for Progress and Housing Policy in Rio de Janeiro and Buenos Aires in the 1960s', *Urban History* 36, no. 2 (2009): 303–26.

and Ciudad Techo in Colombia, to demonstrate the inter-American progression and evolution of architectural and urban design concepts. The research of Ana Patricia Montoya on neighbourhood units is essential to understanding the broader trajectory of architectural and planning ideas through Latin American congresses, specialized magazines, built projects, and key figures.[10] Similarly, Alejandro Bonilla's work on the dissemination of housing ideas in Costa Rica, encompassing CINVA and other institutions, is also integral.[11] Additionally, Sharif Kahatt's comprehensive study of Peruvian neighbourhood units largely contributes to this discourse.[12] The analysis of Ciudad Techo and CINVA's role in its development benefits from the critical insights of Nilce Aravecchia-Botas, Amanda Waterhouse, and Amy Offner.[13] Their focus on aided self-help housing issues and the Cold War context provides a nuanced understanding. These historical perspectives are further enhanced by investigating Ciudad Techo's private investments and seeking graphic materials in Wichita and in the US National Archives and Records Administration within the context of the Alliance for Progress.

The dissertation then turns its focus to the investments made by US companies such as the International Basic Economic Corporation (IBEC) and World Homes in countries like Peru, Chile, Colombia, and Mexico, among other 'friendly nations'. These firms developed 'modern' neighbourhoods targeting middle-income groups, using slogans like 'every man a homeowner, every man a capitalist' to promote their projects as tools for combating communism. Renner's

10 Ana Patricia Montoya, 'Las Unidades Vecinales en América Latina – 1930-1970: Política, bienestar y vivienda como proyecto moderno' (Ph.D. Dissertation, Bogotá, Universidad Nacional de Colombia, 2014).

11 Alejandro Bonilla, 'Circulación de saberes del urbanismo y redes transnacionales del INVU, 1954-1970', *Revista Reflexiones* 97, no. 2 (December 2018): 87–106; Alejandro Bonilla, 'San José, ville globale: Assistance technique, circulation des savoirs et planification urbaine au Costa Rica, 1927-1986.' (Ph.D. Dissertation, Paris, École des Hautes Études en Sciences Sociales, 2021); Alejandro Bonilla, 'La circulación y apropiación del principio de la planificación integral en Costa Rica (1949-1980)', *REVISTARQUIS* 11, no. 2 (25 June 2022): 109–28.

12 Sharif S. Kahatt, *Utopías Construidas: Las unidades vecinales de Lima* (Lima: Pontificia Universidad Católica del Perú, Fondo Editorial, 2019).

13 Nilce Aravecchia-Botas, 'Técnica y política en la producción de la ciudad latinoamericana. Ciudad Kennedy, Bogotá (1960-1963)', *A&P Continuidad* 6, no. 11 (2019): 70–81; Amy Offner, 'Homeownership and Social Welfare in the Americas: Ciudad Kennedy as a Midcentury Crossroads', in *Making Cities Global. The Transnational Turn in Urban History*, ed. A. K. Sandoval-Strausz and Nancy H. Kwak (Pennsylvania: University of Pennsylvania Press, 2017), 47–70; Amanda Waterhouse, 'Grassroots Architects: Planning, Protest, and U.S. Foreign Aid in Cold War Colombia' (Ph.D. Dissertation, Indiana, Indiana University, 2022).

work delves into the roles of businesspeople interwoven with US government agencies.[14] Nancy Kwak's comprehensive research analyses World Homes' investments in Peru as part of broader efforts to promote homeownership within an anti-communist framework.[15] Gyger's thorough research provides an in-depth look at World Homes projects in Peru.[16] This thesis aims to supplement these histories by tracing World Homes' trajectories across various Latin American countries, where they established subsidiaries like Hogares Mexicanos and Hogares Colombianos [Mexican Homes and Colombian Homes]. These subsidiaries operated with US businesspeople in each country, collaborating with local architects and firms.

In the Bolivian context, the study examines housing projects in El Alto and La Paz financed by the IDB and USAID. It shows how this urban operation required not only the approval of housing plans, but also the restructuring of the Bolivian housing institution. Also, on one hand, it discusses Ciudad Satélite, envisaged as a 'suburban neighbourhood' of aided self-help single-family houses with front and back gardens. It was designed in El Alto's challenging climate, housing indigenous migrants and low-income population. On the other hand, the thesis explores the development of the San Miguel neighbourhood, constructed by Hogares Bolivianos [Bolivian Homes], a subsidiary of World Homes. Initially aimed at the working class, this project eventually facilitated the urban expansion into an area predominantly inhabited by affluent families from La Paz, towards the south of the valley. Both projects provide insights into the collaboration between foreign and local architects, drawing on resources from international collection such as the IDB and World Homes' extensive archive in Wichita. This is enriched by local materials and interviews with architects from the era.

The third part of the thesis explores the evolution of the US international housing aid agenda under the aegis of the World

14 Renner, 'Housing Diplomacy'.

15 Nancy Kwak, *A World of Homeowners: American Power and the Politics of Housing Aid* (Chicago: The University of Chicago Press, 2015).

16 Gyger, 'The Informal as a Project'.

Bank. In the 1970s, World Bank President Robert McNamara endeavoured to eradicate 'absolute poverty' by advocating for strategies aimed at 'a more equitable distribution of the benefits of economic growth'. This approach was a reaction to the critiques of development models prevalent at the time. McNamara's tenure, transitioning from his role in the Vietnam War to leading the 'war on poverty', was marked by the inclusion of urban housing in the World Bank's portfolio. The Bank's programme updated architectural and urban design concepts of aided self-help housing through the development of Sites and Services and Slum Upgrading projects. While Robert McNamara's tenure as World Bank President is less examined compared to his role as US Secretary of Defence, works like those by Patrick Sharma offer comprehensive coverage of this period.[17] Also, Edward Ramsamy's research, providing a historical overview of the World Bank's involvement in urban projects, is invaluable.[18] This thesis builds upon these foundations by examining reports from the World Bank's archives, focusing on the impact of housing operations on the built environment, from individual plot designs to the territorial placement of housing projects.

This dissertation conducts a detailed analysis of the World Bank's extensive housing operations, which encompassed more than 350 projects across 35 countries in Africa, Asia, and Latin America between 1972 and 1981. The global scope of these operations spanned a diverse range of small, dispersed, and isolated locations. The projects were implemented in cities with varying climates, topographies, and cultural demographics, resulting in urban developments of differing scales, from small enclaves in dense urban areas to large peripheral housing schemes. The research delves into the World Bank's archives, examining a wealth of visual materials, including architectural plans, urban layouts, territorial maps,

17 Patrick Allan Sharma, *Robert McNamara's Other War: The World Bank and International Development* (Philadelphia: University of Pennsylvania Press, 2017).

18 Edward Ramsamy, *World Bank and Urban Development* (New York: Routledge, 2006). Ramsamy comprehensively explores the inclusion of the urban agenda within the World Bank, with a particular focus on the Robert McNamara era (1968-81). He analyzes the institution's shift from project-based to policy-oriented approaches, and the adoption of neoliberal measures within its agenda during the 1980s and 1990s

diagrams, sketches, and photographs. Many of these materials were declassified for this research and are now publicly available online. The investigation employs a scalar approach, starting from individual housing plots and extending to blocks, neighbourhoods, cities, and national scales. This methodical approach traces the architectural developments across what was then known as the 'third world'. The extensive review of World Bank archival documents is further enriched by the thesis's final chapter, which investigates local materials and concentrates on the specific case study in Bolivia.

The last section of the thesis delves into the World Bank's economic support provided during Hugo Banzer's dictatorship in Bolivia, which encompassed urban projects in El Alto and La Paz. This analysis investigates the reception, contestation, negotiation, and adaptation of housing ideas through interactions between foreign experts and local architects. The case study of Río Seco is examined, highlighting a 'three-handed' Sites and Services project that brought together Bolivian architects, scholars from MIT, and the World Bank's design consultancy. Furthermore, the section assesses slum upgrading and urban improvement initiatives on the hillsides of La Paz, alongside the concepts developed by local architects influenced by Acción Comunal —a housing strategy formulated at CINVA in the mid-1950s and subsequently emulated across Latin America.

The primary sources for this research include institutional, national, and personal archives, predominantly located in the US, Bolivia, Colombia, and Chile.[19] These archives offer a diverse array of qualitative and quantitative data on housing projects, including a collection of photographs, maps, plans, and drawings rarely seen in previous studies. Supplementing these are archival records comprising memoranda, letters, and contracts between foreign insti-

19 Main archives consulted during the research: Centro de Documentación, Ministry of Housing and Urbanism, Chile; Constantinos A. Doxiadis Archives; Collection Centro Interamericano de la Vivienda, Archivo Central e Histórico de la Universidad Nacional de Colombia; Jacob Leslie Crane papers, Cornell University Library, Division of Rare and Manuscript Collections; Charles Abrams papers 1923-1970, Cornell University Library, Division of Rare and Manuscript Collections; Archive of the Ministry of Public Works, Services and Housing, Bolivia; National Archives and Records Administration, College Park, MD, US; Leonard J. Currie papers, Ms-2007-028, Special Collections and University Archives, Virginia Tech; World Bank Group Archives, Washington DC, US; Jean and Willard Garvey World Homes Collection, MS 94-09, Wichita State University Libraries, Department of Special Collections.

tutions and local authorities. These materials are confronted with personal files and a series of interviews with architects, planners, politicians, and housing residents from the relevant periods. This approach enables an in-depth exploration of the micro-histories and contact zones inherent in these housing operations. Additionally, newspapers and specialized literature, such as magazines, journals, and critical reviews, are examined.

This thesis seeks to expand on existing research by art, architecture, planning, and development historians concerning the trajectories of Western Cold War architecture in the 'third world.'[20] While Bolivia has been occasionally referenced in these historical narratives, often in a secondary or tangential role, this thesis posits that a more focused examination of Bolivia's relationship with the US and international institutions can enrich contemporary interpretations of the post-war urban period in Latin America.[21] By analysing the impact on architecture and the built environment in the Andean country, this study addresses the crossroads of development and housing, offering a nuanced understanding that transcends the conventional 'North-South' narrative, revealing more complex layers of inter-American engagement.

20 In addition to the works previously mentioned, comprehensive research focused on exploring the role of architecture within the contexts of development and the Cold War era can be found in: Aggregate, *Architecture in Development: Systems and the Emergence of the Global South* (New York: Routledge, Taylor & Francis Group, 2022); Dalal Musaed Alsayer, 'Architecture, Environment, Development: The United States and the Making of Modern Arabia, 1949–61' (Ph.D. Dissertation, Philadelphia, University of Pennsylvania, 2019); Greg Castillo, *Cold War on the Home Front: The Soft Power of Midcentury Design* (Minneapolis: University of Minnesota Press, 2010); Andra B. Chastain and Timothy W. Lorek, eds., *Itineraries of Expertise: Science, Technology, and the Environment in Latin America's Long Cold War* (Pittsburgh: University of Pittsburgh Press, 2020); Ayala Levin, *Architecture and Development: Israeli Construction in Sub-Saharan Africa and the Settler Colonial Imagination, 1958-1973* (Durham: Duke University Press Books, 2022); Monika Platzer, *Cold War and Architecture: The Competing Forces That Reshaped Austria after 1945* (Zurich: Park Books, 2020); María del Pilar Sanchez-Beltran, 'Tracing the Cold War in Colombian Architecture: A Disregarded Legacy' (Ph.D. Dissertation, London, University College London, 2013); Felicity Scott, *Outlaw Territories: Environments of Insecurity/Architectures of Counterinsurgency* (New York: Zone Books, 2016); Dubravka Sekulić, 'Constructing Non-Alignment: The Case of Construction Enterprise Energoprojekt, 1961–1989, Architecture, Construction Industry and Yugoslavia in the World' (Ph.D. Dissertation, Zurich, ETH Zurich, 2020); Łukasz Stanek, *Architecture in Global Socialism: Eastern Europe, West Africa, and the Middle East in the Cold War* (Princeton: Princeton University Press, 2020); Annabel Jane Wharton, *Building the Cold War: Hilton International Hotels and Modern Architecture* (Chicago: University of Chicago, 2001).

21 The thesis was written with an academic audience in mind, encompassing historians, researchers, educators and students of architecture and disciplines related to the built environment. An effort has been made to provide pertinent information on the Latin American context, in order to ensure comprehensibility for a broad and global readership. In addition, the thesis endeavors to present historical data and information on development discourses within Cold War contexts in a manner accessible to a non- specialized audience."

I

Aided self-help housing for low-income people in the 'third world'

Introduction

> One ordinary day, all of us on the central committee were summoned; we were to be informed about a plan brought by some North American gentlemen, which was called Self-Help and Mutual Aid. It was a plan for self-building our own homes, and it entailed that we, as residents, should provide the labour, erect our homes with solid materials, leave behind our current precarious wooden structures, and thus live in a dignified house. [...] The laying of the foundation stone was marked with great fanfare [...] and naturally, the US flag was raised alongside the Chilean one.[1]
>
> —Adrián Escalona, founding resident of the Germán Riesco aided self-help housing neighbourhood in Santiago de Chile.

In the 1950s, beneath a US flag in a Chilean neighbourhood in the southern extremities of South America, a unique housing programme was inaugurated —one that intriguingly did not include houses. This unconventional initiative, diverging from traditional models, was designed to encourage the expansion of homeownership by offering new residents in areas like Germán Riesco in Santiago de Chile not houses, but a plot and building materials on a long-term payment plan. The underlying principle of this aided

1 Adrián Escalona, 'Comité "Agregado de Nueva la Legua" hoy "Población Germán Riesco"', in *Constructores de ciudad. Nueve historias del primer concurso 'historia de las poblaciones'*, ed. Luis Solís (Santiago: Ediciones Sur, 1989), 36–48.Translated from Spanish by author.

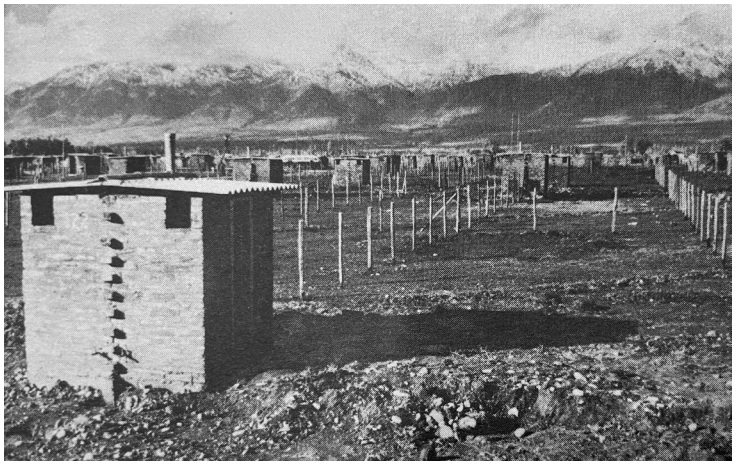


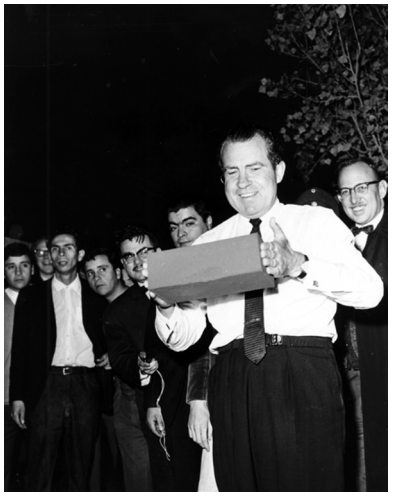
Fig.1: Initial stages of the San Gregorio housing project in Santiago de Chile, showing the plot demarcated with stakes and a sanitary core built at the rear of the site, with the Andes mountain range visible in the background Source: Corporación de la Vivienda, *Chile 1960*, 14.

self-help housing scheme was the belief that ownership of private property would empower families to gradually build their homes and, over time, enhance their neighbourhoods. This approach enabled governments in developing countries to provide a form of housing solution to the lowest-income people —albeit a precarious one— with minimal financial investment from the public sector, thereby maximizing reach. Additionally, this strategy activated capitalism within a significant socio-economic segment that had remained largely inaccessible to the private market. In the Cold War era, poverty in developing nations was constructed as a threat by the so-called 'first world' countries.[2] To mitigate this perceived threat, housing was incorporated into development agendas aimed at stimulating economic growth through foreign technical assistance, as championed by countries like the US in the 'third world' regions of Latin America, Africa, and Asia.

2 Arturo Escobar, *Encountering Development: The Making and Unmaking of the Third World* (Princeton: Princeton University Press, 1995), 21-4.

Fig.2 The San Gregorio housing project in Santiago de Chile during the construction phase. Source: Corporación de la Vivienda, *Plan habitacional*, 99.

The opening quote from one of the founding residents of the Germán Riesco neighbourhood, the first Chilean-US aided self-help housing programme initiated around 1955, recollects the inauguration day of his community. The Institute of Inter-American Affairs (IIAA) partnered with the recently established Corporación de la Vivienda de Chile [Chilean Housing Corporation CORVI] to develop this programme. US housing consultants were active in Santiago, facilitated by a basic technical cooperation agreement signed in 1951 between the US and Chile. This agreement was in line with the ethos of international collaboration introduced by the 1949 Point Four of US foreign policy. The Germán Riesco pilot project was succeeded by the more expansive San Gregorio neighbourhood in the late 1950s, starting with a few sanitary cores and plots delineated with stakes. A few years later, it evolved, mirroring a sort of suburban housing development.[figs1,2] Subsequently, the Operation Site programme in the mid-1960s



Figs.3-4 Richard Nixon operating the CINVA-RAM machine to manufacture bricks during his visit to the San Gregorio neighbourhood in Chile. Source: Zig-Zag Pool fotográfico, Copyright© "Colección Museo Histórico Nacional", Chile

substantially broadened the aided self-help housing model across Chile. This programme involved allocating plots for the incremental construction of single-family homes with gardens, typically situated on the outskirts of Chilean cities. San Gregorio attracted numerous notable visitors, including US President Dwight Eisenhower in 1960 and Willard Garvey, a US wheat entrepreneur who diversified into low-cost housing construction in developing countries, leveraging US financing mechanisms and anti-communist rhetoric to bolster his business ventures.

In 1967, Richard Nixon undertook a brief two-day US pre-presidential tour of Santiago, Chile, during which he visited the San Gregorio neighbourhood.[figs.3,4] In a sense, the photographs from this visit encapsulate the trajectory of ideas discussed in this section. Notably, Nixon is seen using a Cinva-Ram machine, a device designed for the easy and cost-effective production of building blocks, accessible for use by individuals with limited technical

Fig.5 Centro Interamericano de la Vivienda [Interamerican Housing Centre] CINVA, Bogotá, Colombia. Source: Currie, Leonard J. (Leonard James), 1913-1996 (Photographer), "CINVA Trainers (Inter-American Housing and Planning Center), Bogotá," *Southwest Virginia Digital Archive*, accessed November 18, 2023, https://di.lib.vt.edu/items/show/669

construction skills. The Cinva-Ram was devised by a Chilean engineer in the mid-1950s at the Centro Interamericano de Vivienda [Inter-American Housing Centre CINVA] in Colombia, an institution established in 1951 through an Organisation of American States (OAS) initiative. CINVA played a crucial role in promoting low-cost construction methods and aided self-help housing strategies, employing an interdisciplinary approach and attracting professionals from various Latin American countries.[fig.5] Thus, San Gregorio became a pivotal site for the convergence of Inter-American aided self-help housing ideas, receiving extensive technical, entrepreneurial, and geopolitical support from the US.

The initial part of this thesis examines the incorporation of low-cost housing into development agendas promoted by the US in the early 1950s. This focus was primarily on providing technical assistance to curb the spread of communism in developing countries. The first chapter analyses the Point Four programme, announced

by US President Harry S. Truman. This programme aimed to extend US knowledge and technological advances to aid the economic growth of 'third world' countries, thereby promoting US ideals and countering communist influence. The second chapter delves into the expansion of aided self-help housing by US agencies and allied international institutions like the United Nations (UN). This expansion involved global missions of experts disseminating housing knowledge initially piloted in Puerto Rico in the late 1930s.

Chapters three and four trace an Inter-American trajectory of aided self-help housing ideas. This exploration includes their application in public policy and academic research, along with training centres, assessing their specific impacts on the built environment. The Chilean case, beginning with the Germán Riesco neighbourhood and culminating in the national expansion through Operation Site, is thoroughly examined. This narrative extends to the discontinuation of the Chilean aided self-help housing programme in the 1970s by a socialist government, supported by the communist party. Additionally, CINVA is examined as a crossroads for inter-American housing development, where concepts such as low-cost construction, aided self-help, and community organisation were researched, tested, and disseminated throughout the continent. This includes the Acción Comunal programme and its subsequent replication across the region. The experiences of Chilean and Bolivian architects at CINVA, among others, are reviewed in this and subsequent parts of the thesis.

The fifth chapter provides an in-depth examination of the development agenda's impact and the role of housing during the post-1952 Bolivian Revolution reform period. It delves into the technical mission of UN housing consultant Charles Abrams in Bolivia and his efforts to expand private homeownership with minimal public expenditure. This initiative resulted in the Roof Loan scheme of aided self-help housing, previously implemented in Ghana. This chapter, along with the entire thesis, examines the cultural interactions in Bolivia, featuring both local and foreign housing ideas.

1

Technical assistance as foreign policy towards developing countries. 1949-60

> Fourth, we must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas. [...] Our aim should be to help the free peoples of the world, through their own efforts, to produce more food, more clothing, more materials for housing, and more mechanical power to lighten their burdens.[1]
> —US President Harry S. Truman, 1949.

On January 20, 1949, President Harry S. Truman used the fourth point of his second-term inaugural address to outline the US foreign aid policy to face the coming Cold War years. This policy, later called the Point Four programme, promoted US technical assistance towards the then-labelled 'underdeveloped' regions of Latin America, Africa, and Asia. Truman's speech began with a lengthy comparison between the 'merits' of democracy and the 'flaws' of communism: 'I state these differences, not to draw issues of belief as such, but because the actions resulting from the Communist philosophy are a threat to the efforts of free nations to bring about world recovery and lasting peace.'[2] In a similar vein, poverty in developing countries was portrayed as 'a threat both to them and to more prosperous areas',[3] establishing a connection between development and security.[4] This threat, it was argued, could be mitigated through

1 Harry S. Truman, *Public Papers of the Presidents of the United States: Harry S. Truman (1949) Volume 5* (Washington, DC: US Government Printing Office, 1964), 114-5.
2 Ibid., 113.
3 Ibid., 114.
4 Michael E. Latham, *The Right Kind of Revolution: Modernization, Development, and U.S. Foreign Policy from the Cold War to the Present* (Ithaca: Cornell University Press, 2010), 11.

Fig.6 US President Harry S. Truman delivering a speech in front of the Kentucky Dam. Source: TVA - Tennessee Valley Authority. Available at: www.tva.com/about-tva/our-history/built-for-the-people/tva-s-mightiest-dam (Accessed August 2020)

development propelled by US knowledge, with 'more material for housing' forming part of this agenda for the 'third world'.

The Point Four programme was rooted in the conviction that greater production held the key to prosperity and peace, 'and the key to greater production is a wider and more vigorous application of modern scientific and technical knowledge'.[5] Hence, Truman suggested that development was guided by an 'universally valid knowledge', rather than issues related to specific historical context or political choices.[6] Truman's stance could be traced back to a speech he delivered in front of the Kentucky Dam on the Tennessee River in October 1945, a project executed by the Tennessee Valley Authority (TVA).[fig.6] This was the same year Truman assumed the presidency following the sudden death of Franklin D. Roosevelt, a few months after dropping the atomic bombs and a few weeks after Japan's surrender, marking the end of World War II and the onset of the Cold War:

5 Truman, *Public Papers Truman (1949)*, 115.
6 Latham, *Right Kind of Revolution*, 11.

> The completion of this dam marks a new high point in modern pioneering in America (...) it has inspired regional resource development all over the world. Distinguished observers from more than fifty countries have come to this historic American Valley. They went away to try to adapt to their own regions the lessons that have been learned here from actual experience (...) it is more than dams and lock and chemical plants and power lines. It is an important experiment in democracy.[7]

Symbolically, the Kentucky Dam encapsulates Truman's foreign aid policy. It underscores the belief that US technological advancements and expertise could foster a cooperative agenda promoting the 'American way of doing things' beyond the nation's borders. Speaking at the dam, Truman emphasised the importance of knowledge exchange with international experts, a concept that would later be expanded through Point Four as an anti-colonial initiative and a symbol of a new set of cooperative, mutually beneficial international relations.[8]

The TVA, a US public power company established as part of the 1933 New Deal, was a significant development precursor to Point Four. The New Deal was a domestic assistance and economic development initiative launched by President Roosevelt to address the Great Depression in the US. Truman, a senator at the time, was well-acquainted with this programme. TVA commenced with the construction of 32 hydroelectric dams along the Tennessee River. Though its origin was in flood control and electricity generation, its scope broadened to include an integrated plan for navigation, tourism, infrastructure, housing improvement, forestry industry support, and agricultural development, among other regional econom-

7 Harry S. Truman, *Public Papers of the Presidents of the United States: Harry S. Truman (1945) Volume 1* (Washington DC: US Government Printing Office, 1961), 389-94.
8 Latham, *Right Kind of Revolution*, 11.

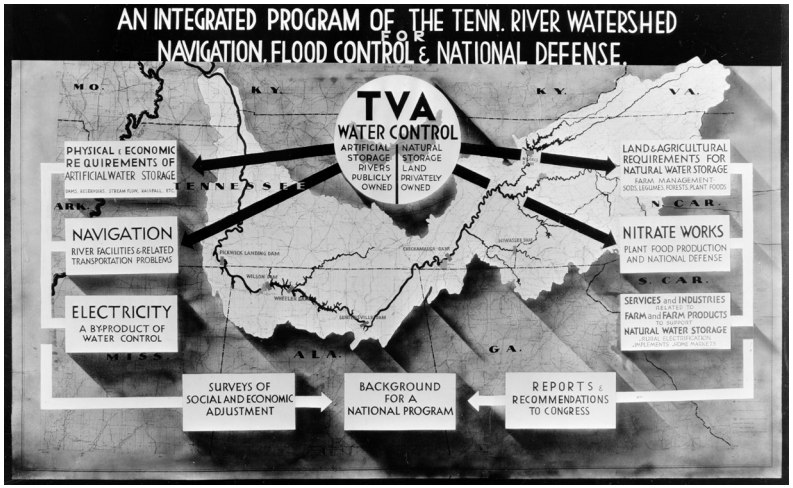


Fig.7 Comprehensive Planning by the Tennessee Valley Authority. Source: United States Tennessee Valley (between 1933 and 1945). [Photograph]. Retrieved from the Library of Congress, https://www.loc.gov/item/2017877279/

ic activities.[fig.7] Its primary goal was to stimulate economic growth in a part of the US affected by social discord and extensive poverty.[9]

David E. Lilienthal, one of the first directors of TVA, wrote the book *TVA: Democracy on the March*.[10] He played a role in exporting its development approach overseas, viewing it as a response to decolonization.[11] Furthermore, historian Arthur Schlesinger regarded the TVA as 'a weapon which, if properly employed, might outbid all the social ruthlessness of the Communists for the support of the people of Asia.'[12] Observer visits such as those to the Kentucky Dam were a cornerstone of the Point Four development programme, which promoted knowledge transfer, extending back-and-forth trajectories of technicians and experts between the US and developing nations.

9 A critique on the TVA in: Reinhold Martin, 'Abolish Oil', *Places Journal*, 16 June 2020, https://doi.org/10.22269/200616. Accessed April 2021.
10 David E. Lilienthal, *TVA: Democracy on the March* (New York: Penguin Books, 1944).
11 David Ekbladh, *The Great American Mission: Modernization and the Construction of an American World Order*, America in the World 6 (Princeton: Princeton University Press, 2011), 60-3, 80-6.
12 Arthur M. Schlesinger, *The Vital Center: The Politics of Freedom* (New York: Routledge, 2017), 170.

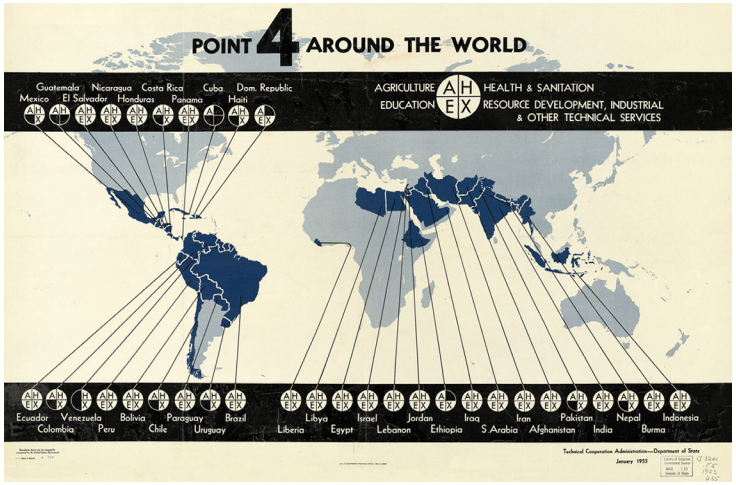


Fig.8: Worldwide activities of Point Four as of January 1953. Source: Point 4 Around the World. [Washington, D.C.: Technical Cooperation Administration, Department of State, January . Washington, D.C.: U. S. Government Printing Office, 1953] [Map] Retrieved from the Library of Congress, https://www.loc.gov/item/map53000864/.

Several US institutions organized these itineraries, including the Technical Cooperation Administration (TCA 1950-53), which was later replaced during President Eisenhower's term (1953-60) by the Foreign Operations Administration (FOA 1953-55), and then by the International Cooperation Administration (ICA 1955-61). Specific to Latin America, the Institute of Inter-American Affairs (IIAA) coordinated the US Operations Mission (USOM). These agencies primarily focused on agriculture and health programmes, followed by education and industry, along with hydropower and transportation initiatives.[fig.8] Although housing was a minor component of US foreign aid, its concepts permeated the developing world, as this thesis traces them primarily through their Latin American trajectories.[13]

Regarding the housing crisis affecting the lowest-income urban populations, the Point Four initiative exported a strategy

13 This thesis complements comprehensive research such as: Andrea Renner, 'Housing Diplomacy: US Housing Aid to Latin America, 1949-1973' (Ph.D. Dissertation, New York, Columbia University, 2011).

tried and tested since the late 1930s in Puerto Rico —a US free associated state— implemented in collaboration with US experts such as Jacob Crane. This strategy, later disseminated globally as 'aided self-help housing', consisted of providing families with access to a plot so that they could build their houses with the support of government assistance. Self-help strategies of this nature were endorsed in low-income countries through this period's development agenda.

Some US missions in the 1950s aimed to understand strategies that enabled local people to enhance their social, economic, and built environments through individual and community development. In this way, people could supplement or complement the aid or services they did not receive from government or private companies. According to the FOA's definition, 'Community Development is a technique for stimulating organized self-help undertakings through the democratic process. It aims to mobilize the principal resource of most underdeveloped areas –their workforce and interest in improving their own lot– once they have become aware that improvement is possible.'[14]

Consequently, for instance, the ICA sent missions to monitor the aforementioned aided self-help housing programmes in Puerto Rico, or to study agriculture and animal husbandry in India, the construction of Health Centres in the Peruvian Amazon, rural communities in Jamaica, and the Nucleo Schools in Bolivia's highlands, among other local initiatives in developing countries.[15] ICA consultants viewed support for 'free governments' through their community development as an opportunity to perceive democracy as an 'exportable commodity'[16] and a 'means of allaying threatening discontent and helping assure political stability,' critical factors in the context of the Cold War.[17]

14 Harold S. Adams et al., 'Community Development Programs in Philippines, Pakistan, India, Iran, Egypt, the Gold Coast, Peru, Bolivia, Puerto Rico, and Jamaica' (Washington: International Cooperation Administration, 1955), summary record 2.
15 Ibid.
16 Ibid. summary record, 23.
17 Ibid. Team II, 68-9.

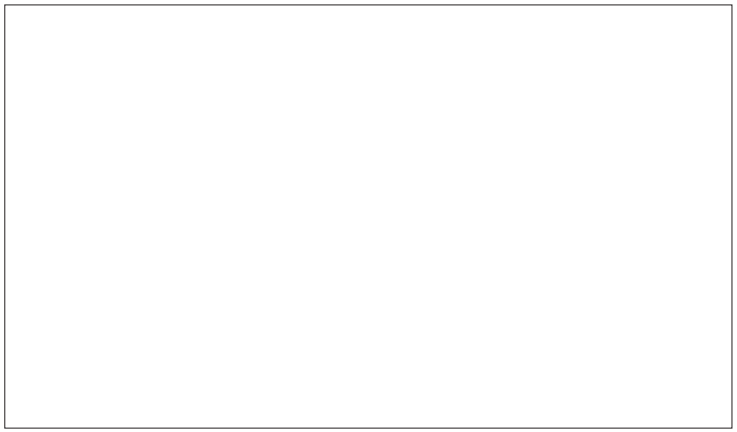


Fig.9 USSR, United Kingdom and Yougoslavia, among the countries attending the Bretton Woods Conference, 1944. Source: Hulton Archive/Getty Images.

Arturo Escobar argues that 'the invention of development necessarily involved the creation of an institutional field from which discourses are produced, recorded, stabilized, modified and put in circulation'.[18] The US government leveraged not only its institutions such as the ICA, but also its universities and research centres to host foreign students, and supported international organizations to extend its geopolitical boundaries. Included in this expansion were entities founded towards the end of the Second World War in anticipation of the new post-war economic and political order. The 1940s marked the establishment of the International Monetary Fund (IMF), the World Bank, and the United Nations (UN), among others. For the Americas, the Organization of American States (OAS) was included. These institutions were headquartered in Washington DC and New York.

In 1944, the US hosted the United Nations Monetary and Financial Conference, also known as the Bretton Woods Conference.[fig.9] Representatives from 44 countries convened at the Mount

18 Arturo Escobar, *Encountering Development: The Making and Unmaking of the Third World* (Princeton: Princeton University Press, 1995), 46.

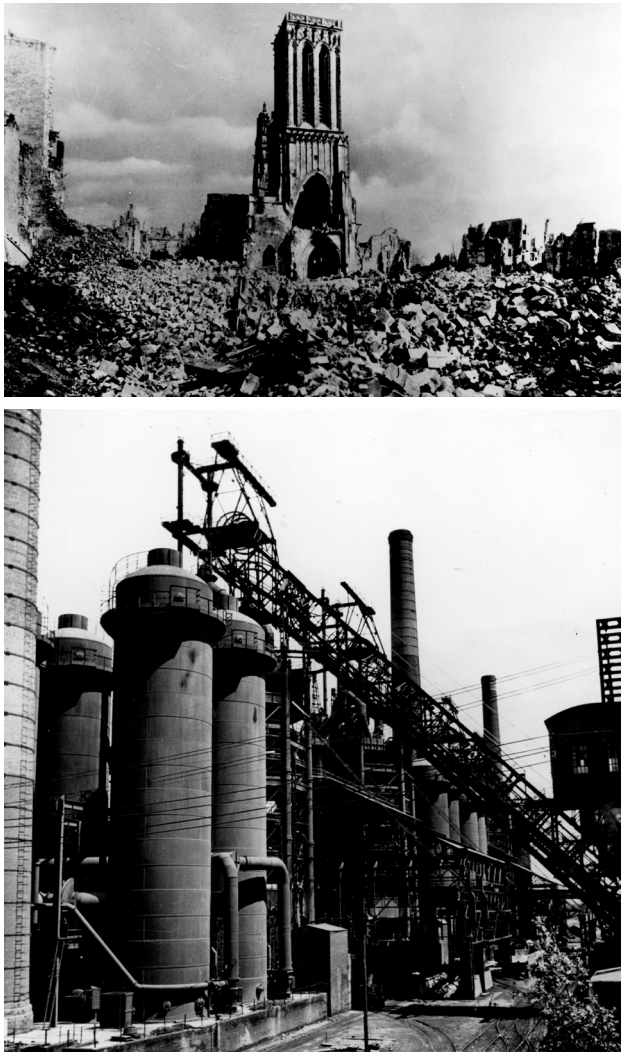
Washington Hotel and Resort in the US, including delegates from the Soviet Union, who ultimately did not ratify the final agreement. Harry Dexter White of the US Treasury Department and British economist John Maynard Keynes, both instrumental in drafting the blueprints for two new international bodies, led the conference.[19] The three-week meeting aimed to chart the economic trajectory for the following decades in the Western world. It laid the groundwork for the IMF and the International Bank for Reconstruction and Development, later known as the World Bank.

The IMF was envisioned as an institution to promote international monetary cooperation, ensure the stability of exchange rates and financial flows, and provide loans to member countries during times of crisis. The World Bank was to be an institution dedicated to reconstructing European cities and promoting economic development. An implicit agreement that has been maintained to this day dictates that the President of the IMF and the World Bank would be European and US citizens, respectively.

> With values secured and held stable, it is next desirable to promote world-wide reconstruction, revive normal trade, and make funds available for sound enterprises, all of which will in turn call for American products—hence the second proposal for the Bank for Reconstruction and Development.[20]

The first loan from the World Bank was extended to France in 1947, prioritizing it over applications from Poland and Chile.figs.10-1 The loan amounting to $250 million was allocated towards importing raw materials and renovating transport system by procuring trains, ships, and aeroplanes. The steel industry and agriculture sectors also underwent modernization. The largest

19 Mark Mazower, *Governing the World: The History of an Idea* (London: Penguin Books, 2012), 201.
20 US Department of State, *Proceedings and Documents of the United Nations Monetary and Financial Conference, Bretton Woods, New Hampshire, 1–22 July 1944*, vol. II (Washington DC: US Government Printing Office, 1948), 1148.



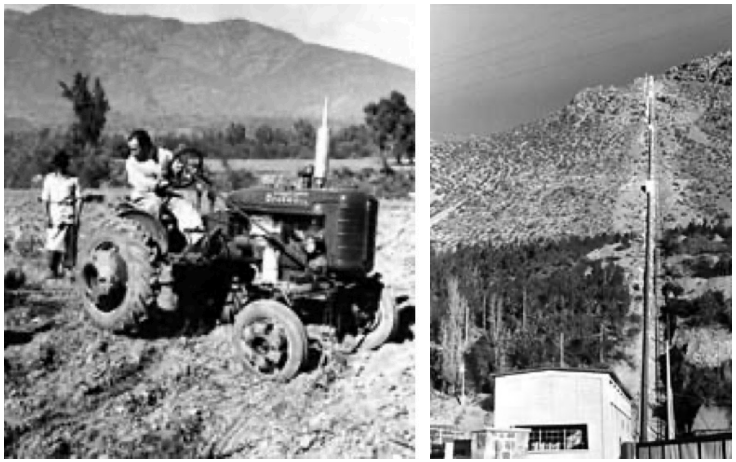
Figs.10-1 France, the first country to receive World Bank funds post-World War II. Source: World Bank group.

Fig.12 Countries participating in the Marshall Plan. Source: The Marshall Plan at the Mid-Mark, 1950. Averell Harriman Papers, Manuscript Division, US Library of Congress.

part of the loan was expended for purchases in the US.[21] Subsequent loans were accorded to the European nations of Denmark, Luxembourg, and the Netherlands.

In 1948, the US implemented the Marshall Plan, providing direct economic aid to Western Europe.[fig.12] Secretary of State George Marshall, in conjunction with President Truman, devised a strategy involving transferring $13 billion to nations devastated by the Second World War. This initiative incited a change in international agencies like the World Bank, which shifted their primary focus from Europe to developing countries.

21 World Bank, 'France - Loan Administration Report on the $250,000,000 Loan to the Credit National (English)', Staff Appraisal Report, Loan Series No. L89 (Washington DC: World Bank Group, 22 May 1950), 1.



Figs.13-4 Chile, the first country outside Europe to receive a loan from the World Bank. Source: World Bank group

Also in 1948, the World Bank extended its first loan to a country outside of Europe for a significantly smaller amount than that previously given to France. Chile received two loans totalling $16 million. The first was for an agricultural machinery project, and the second was for a power and irrigation project aimed at enhancing electrical power, upgrade urban and suburban transport systems, develop forestry sectors, electrify railways, and modernize port facilities.[figs.13-4] Again, the majority of the loan was used on purchases in the US.[22] Initially, and for decades, the US supplied a third of the Bank's funds, hence possessing the most significant percentage of the voting power.

22 World Bank, 'Chile - First Loan Administration Report on the Bank Loans to Chile (English)', Staff Appraisal Report, No. WH13 (Washington DC: World Bank, 23 November 1953), 2.

By 1954, the US also accounted for one-third of the total UN budget: 'given the powerful American role in funding, staffing and shaping the UN system, the line dividing global agencies from American ones was hard to trace from the start'.[23] The UN was established in 1945, shortly before the end of the war, with the endorsement of 51 countries. It was intended to replace the post-World War I League of Nations. Its objective was to prevent future international conflict. Among other pursuits, it continued the technical assistance approach of the absorbed United Nations Relief and Rehabilitation (UNRRA) and incorporated the TVA development model into some of its programmes.[24] In terms of housing, the Housing and Town and Country Planning Section (HTCP) was established in the late 1940s, partly due to the advocacy of Jacob Crane[25] and publicly requested by Catherine Bauer and Jaqueline Tyrwhitt.[26] From 1951 to 1956, its director was the architect Ernest Weissmann, who had been part of UNRRA.

In 1948, the OAS charter was signed, continuing the former Pan-American Union as a General Secretariat. The Colombian Alberto Lleras Camargo served as the Secretary General —to date all Secretaries General have been citizens of Latin America. The OAS featured a Housing and Planning division directed by architect Anatole Solow, establishing regional cooperation projects such as the Inter-American Housing Centre (CINVA), founded in Colombia. In conjunction with trade and security efforts, such inter-American cooperation strategies were integral to the OAS's responsibilities. This kind of cooperation aligns with previous regional programmes such as the Good Neighbor policy, implemented by US President Roosevelt in 1933 towards Latin America in pursuit of reciprocal economic opportunities.[27]

23 Mazower, *Governing the World*, 277.

24 Ekbladh, *The Great American Mission*, 86-94; Sara Lorenzini, *Global Development: A Cold War History* (Princeton: Princeton University Press, 2019), 96-101.

25 Richard Harris, 'The Silence of the Experts: "Aided Self-Help Housing", 1939-1954', *Habitat International* 22, no. 2 (1998), 176-7.

26 M. Ijlal Muzaffar, 'The Periphery within: Modern Architecture and the Making of the Third World' (Ph.D. Dissertation, Massachusetts Institute of Technology, 2007), 25; H. Peter Oberlander and Eva Newbrun, *Houser: The Life and Work of Catherine Bauer* (Vancouver: UBC Press, 1999), 239.

The next chapters explore the convergence of the Point Four trajectories with those of the UN and OAS, particularly through the lens of aided self-help housing ideas propagated by the development discourse of the 1950s. Low-cost housing initiatives were particularly pertinent in Latin America —then one of the world's most urbanised region, with widespread informal settlements. Low-income individuals from rural areas migrated to urban centres seeking employment opportunities and access to better education and health services. Latin America often concentrates a substantial population in a single city per country, such as Buenos Aires, Santiago de Chile, or Lima. This concentration exacerbated the urban housing crisis. While it is widely stated that over half of the world's population has resided in cities since the 2000s, Latin America was already 50% urban by 1960, with its urban population now reaching 80%.[28]

In the 1950s, informal settlements were on the rise throughout Latin America: Peruvian 'barriadas', Brazilian 'favelas', Argentine 'villas miseria' and Chilean 'poblaciones callampas', names that reflect local characteristics.[29] These settlements emerged as spontaneous solutions to government and private sector failures in addressing the housing shortage. They demonstrated the capacity of individuals to organise themselves and construct their own homes. Thus, the development discourse was embodied through technical assistance and the implementation of aided self-help housing at the crossroads of economic scarcity and familial capacity to build homes.

27 Stephen G. Rabe, *Eisenhower and Latin America: The Foreign Policy of Anticommunism* (Chapel Hill: The University North Carolina Press, 1988), 6-25.

28 Nowadays, in countries like Argentina, Brazil, Chile, and Venezuela close to 90 per cent of the population lives in cities. Source: World Bank data.

29 On informal settlements in Brazil and Chile in Cold War contexts, see: Emanuel Giannotti and Rafael Soares-Gonçalves, 'La guerra fría en las favelas y las poblaciones, 1945-1964. Una disputa entre comunistas e Iglesia Católica', *Izquierdas* 49 (April 2020): 642–62.

In the early 1950s, the Point Four missions expanded the Puerto Rican housing strategy propagated by Jacob Crane. Throughout that decade, these ideas were manifested in various forms supported by organizations such as the UN and the OAS. They were also adapted and supplemented by the local experiences of different governments, which are reviewed next.

2

US and UN's aided self-help housing missions

Following the launch of Point Four, in the early 1950s, technical collaboration agreements arose between the US and countries in Latin America, Africa and Asia, broadening the geographical reach of the US Operations Mission (USOM). Jacob Crane, a US engineer and city planner associated with the International Housing Service (IHS) of the Housing and Home Finance Agency (HHFA) —who worked previously at TVA— played a pivotal role in incorporating housing consultants into these missions.[1]

Although international entities such as the World Bank refrained from addressing urban housing in their aid agendas during this period, others, such as the UN, signed agreements with multiple nations to initiate housing missions involving a variety of consultants.[2] Ernest Weissmann, a Yugoslav architect, orchestrated these missions through the Housing and Town and Country Planning Section (HTCP) of the UN Department of Social Affairs. This led to the recruitment of housing consultants such as the US lawyer Charles Abrams and Crane himself, among others. The housing expertise exported through these missions from the Western Bloc to developing nations was profoundly shaped by the recent concept of aided self-help.

To better contextualize the materialization of the US-promoted development discourse in Latin America during the 1950s, the following sections briefly explore two trajectories of aided self-help housing. Initially, the dissemination of ideas originating from Puerto Rico in 1939 through the Land and Utilities scheme is dis-

1 Richard Harris, 'A Burp in Church: Jacob L. Crane's Vision of Aided Self-Help Housing', *Planning History Studies*, no. 11 (1997): 3–16.

2 On the role of the UN in housing issues in this period: Jorge Francisco Liernur, 'Mutaciones de cancer a capricornio. La construcción del discurso occidental sobre la vivienda en territorios tropicales: de instrumento colonialista a factor de conflicto en la Guerra Fría', *Estudios del hábitat* 13, no. 1 (June 2015): 1–60; Muzaffar, 'The Periphery Within'.

cussed. This initiative was later extended to governmental institutions like CORVI in Chile and academic centres such as CINVA in Colombia, among others. Subsequently, a translation of aided self-help housing ideas conveyed through UN missions under Abrams' leadership is examined. This includes the introduction of the Roof-Loan scheme, conceived in Ghana in 1954 and later proposed to the Bolivian government in 1959, along with other nations.

US Operations Mission and International Housing Service

As noted by scholar Richard Harris, a form of amnesia seemed to prevail among those engaged in debates around aided self-help housing.[3] Most traced the origins of these concepts to the 1960s and their propagation through the World Bank in the 1970s, attributing significant influence to the ideas of British architect John F.C. Turner.[4] To address this oversimplification, Harris wrote numerous academic articles revisiting the paths taken by Crane and Abrams in the 1950s, while extending the historical chronology of self-help housing to early twentieth-century Sweden.[5] Within this extended context, he underscored the importance of the Puerto Rican experience initiated in the late 1930s. It's worth noting that Crane and others had already published aspects of these histories during the second half of the twentieth century.[6]

3 Harris, 'The Silence'.

4 Turner lived in Peru between 1957 and 1965 and disseminated his approaches to housing mainly from the second half of the 1960s, publishing his most relevant books in 1972 and 1976. John F. C. Turner, 'Dwelling Resources in South America', *Architectural Design*, August 1963; John F. C. Turner, 'Architecture of Democracy', *Architectural Design*, August 1968; John F. C. Turner and Robert Fichter, *Freedom to Build: Dweller Control of the Housing Process* (New York: Macmillan, 1972); John F. C. Turner, *Housing by People. Towards Autonomy in Building Environments* (New York: Pantheon Books, 1976).

5 Harris, 'A Burp in Church'; Harris, 'The Silence'; Richard Harris, 'Slipping through the Cracks: The Origins of Aided Self-Help Housing, 1918-53', *Housing Studies* 14, no. 3 (1 May 1999): 281–309; Richard Harris, 'A Double Irony: The Originality and Influence of John F.C. Turner', *Habitat International* 27, no. 2 (June 2003): 245–69; Richard Harris, 'Learning from the Past: International Housing Policy since 1945—an Introduction', *Habitat International* 27, no. 2 (June 2003): 163–66; Richard Harris and Ceinwen Giles, 'A Mixed Message: The Agents and Forms of International Housing Policy, 1945–1973', *Habitat International* 27, no. 2 (June 2003): 167–91.

6 Jacob L. Crane, 'Huts and Houses in the Tropics', *Unasylva* III, no. 3 (June 1949): 100–105.; Jacob L. Crane and Robert E. McCabe, 'Programmes in Aid of Family Housebuilding "Aided Self-Help Housing"', *International*

In addition to establishing that the history of aided self-help housing precedes Turner's ideas, Harris draws a dual irony related to Turner's impact. Firstly, those concepts that would have most captivated Turner, such as dwelling control, were the least influential within international organizations. Secondly, Turner has been credited for conceiving schemes like the World Bank's Sites and Services, despite his initial strong criticism of that strategy.[7] Yet, despite the comprehensiveness of Harris's work, traces of these ironies and a somewhat skewed perspective on the history of aided self-help housing continue to permeate, reinforced by recent influential works such as Mike Davis's *Planet of Slums*.[8] While Turner's contribution to the dissemination of self-help housing concepts is undeniably significant, it post-dated the initial expansion of the ideas examined in this period. As Crane himself acknowledged in 1954:

> For several years the International Housing Service of the Housing and Home Finance Agency has been helping to evolve the principles and methods of what has come to be known as Aided Self-Help Housing. I believe the term was used first in an article of mine published by Unasylva, of the United Nations Food and Agriculture Organization, in 1949.[9]

Contemporary scholars quote Harris to credit Crane with being the pioneer who first introduced the term 'aided self-help housing'. However, Crane credited himself with this concept as early as 1954. The article to which Crane referred, ***Huts and Houses in the Tropics***, was published in the US in May 1949, followed

Labour Review 61, no. 4 (1950): 367–426.; International Housing Service, 'Aided Self-Help in Housing Improvement', *Ideas and Methods Exchange*, September 1954; Hans Harms, 'Historical Perspectives on the Practice and Purpose of Self-Help Housing', in *Self-Help Housing: A Critique*, ed. Peter M. Ward (London: Mansell Publishing Limited, 1982), 17–53.

7 Harris, 'A Double Irony'; Kathrin Golda-Pongratz, José Luis Oyón, and Volker Zimmermann, eds., *Autoconstrucción. Por una autonomía del habitar. Escritos sobre urbanismo, vivienda, autogestión y holismo* (Logroño: Pepitas de Calabaza, 2018), 129-41.

8 Mike Davis, *Planet of Slums* (London: Verso, 2006), 70-94.

9 International Housing Service, 'Aided Self-Help', vi.

by publication in India in June, and Spanish translation in Panama in July of the same year.[10] The piece describes the components of an aided self-help housing scheme, informed by Puerto Rican experiences. The primary element underscored was the provision of secure land tenure for families, enabling them to incrementally build their homes with government assistance. This publication coincided with Truman's announcement of Point Four and presented an opportunity for Crane to envision the expansion of these ideas. He integrated these concepts into the USOM, using the IHS's collaboration with various consultants beginning to venture into developing nations.[11]

Although academic literature on Crane primarily emphasizes his role and knowledge in Puerto Rican housing programmes, Crane also understood the broader Latin American context. In a succinct list Crane wrote for Harold Robinson —a USOM housing consultant— during his 80s, he recounted and expanded on his housing trajectory.[12] Crane traced his initial engagement with housing back to 1920 in Venezuela, and more specifically, near Cúcuta, Colombia, where he reportedly implemented a programme to enhance workers' housing. Subsequently, in 1938, he began his affiliation with Puerto Rico via the US National Housing Agency (USHA).[13] In 1941, he attended an inter-American municipal congress in Santiago de Chile, leveraging the occasion to visit Peru, Brazil, and Argentina.[14] Then, under the aegis of the US State Department in 1946, he visited Brazil, Uruguay, Chile, Peru, Ecuador, Colombia, and Panama, envisioning future regional collaborations with the US during both trips.[15]

10 Crane, 'Huts and Houses'; Jacob L. Crane, 'Chozas y Casas en los Trópicos', *Ingeniería y Arquitectura*, no. 24 (July 1949): 279–83.

11 Renner, 'Housing Diplomacy', 26-51.

12 Jacob L. Crane, 'Events in the Early Years of Participation by the U.S. Government in International Cooperation for the Improvement of Shelter and Housing', December 1972, Box 4, Jacob Leslie Crane papers, Cornell University Library, Division of Rare and Manuscript Collections, (heafter designated CU1).

13 Jacob L. Crane, *Worker's Housing in Puerto Rico* (Montreal: International Labour Office, 1944).

14 Jacob L. Crane, 'Impressions of Housing in South America', 15 October 1941, Box 4, CU1.

15 "In every country I visited I found strong spontaneous interest in the possibility of a world organisation for housing and urbanism, through which the exchange of information and experience, and of resources, both technical and material, could be facilitated." in Jacob L. Crane, 'Housing Progress in South America', *Bulletin of the Pan American Union* LXXX, no. 5 (May 1946), 241, 248.

Crane was especially productive writing on Latin American issues between 1944 and 1946. He began with an extensive examination of Puerto Rico's low-cost housing history.[16] He addressed Brazil's favelas, informal settlements in Bolivia, affordable housing in Costa Rica, large-scale government-sponsored projects in Chile, and public housing in Argentina, among other subjects.[17] Included among these publications was *Neighbors without Houses*, co-authored with US housing and planning scholar Francis Violich, known for his extensive expertise on the region.[18] Given Crane's familiarity with these and other circumstances in what were then referred to as the 'tropical zones' of the world, he likely recognised that the Puerto Rican model could be appropriately adapted to these regions.

Among the various housing alternatives that Crane analysed in Puerto Rico during the first half of the twentieth century, he particularly emphasized the Land and Utilities experience.[figs.15-9] As suggested by its name, this model relied on the provision of secure tenure on a single-family plot in an area with access to potable water and electricity. Consequently, 'extremely low-income' families could access a ten by fifteen-metre plot, with paved roads, sidewalks, street lighting, playground areas, and a community centre. A concrete sanitary core equipped with toilet, shower and laundry facilities was set up at the intersection of four plots. The inaugural scheme of this kind was implemented around 1939 by the Ponce Authority with assistance from the USHA, introducing Caserío Borinquen as the first experience with 210 units. In this instance, families relocated their modest homes from the informal settlements they were departing. The proj-

16 Crane, *Worker's Housing in Puerto Rico*.

17 Jacob L. Crane, 'Progress Report on the World Housing Problem', *The Journal of Housing* 3, no. 9 (September 1946): 189–92; Jacob L. Crane, 'We Want Homes', *Free World* 11, no. 2 (February 1946): 53–56.

18 Francis Violich and Jacob L. Crane, 'Neighbors without Houses', *The Inter-American* IV, no. 8 (August 1945): 18–23; Francis Violich, *Cities of Latin America. Housing and Planning to the South* (New York: Reinhold Publishing Corporation, 1944); Francis Violich, *Low-Cost Housing in Latin America*, ed. Anatole Solow (Washington DC: Pan American Union, 1949).

Figs.15-7 Puerto Rico aided self-help housing programmes. Sources: (top) Office of the administration, 'Aided Self-Help Housing Shelter Improvement in Tropical Puerto Rico' (Housing and Home Finance Agency, August 1950), 2. (bottom left) Planning board of the Commonwealth of Puerto Rico, Faith in People (San Juan: Puerto Rico Planning Board, 1954), 26. (bottom right) HHFA International Housing Service, 'Aided Self-Help in Housing Improvement', Ideas and Methods Exchange 18, September 1954, 21.

Figs.18-9 Sources: (opposite page top) Delano, Jack, photographer. A land and utility municipal housing project, Ponce, Puerto Rico. United States Ponce Puerto Rico, 1941. Dec [Photograph] Retrieved from the Library of Congress, https://www.loc.gov/item/2017877829/ (opposite page bottom) Delano, Jack, photographer. Untitled photo, possibly related to: A land and utility municipal housing project in Ponce, Puerto Rico. United States Ponce Municipality Ponce Puerto Rico, 1941. Dec [Photograph] Retrieved from the Library of Congress, https://www.loc.gov/item/2017751008/.

ect's cost was merely a quarter of the expense of a government-supported concrete apartments housing programme on the island.[19]

These low-income housing strategies persisted under the governorships of Rexford Tugwell (1941-46) and, later, Luis Muñoz Marín (1949-65), a period which historian Adrián Gorelik portrays as a field of advanced US planning practice.[20] The principles of low-cost housing were further developed and expanded by figures such as Rafael Picó, Puerto Rico Planning Board Chairman, and Luis Rivera Santos, Director of Puerto Rico's Social Programmes Administration during the 1940s and 1950s.[21] They experimented with self-help alternatives, leading to strategies similar to Land and Utilities, like Minimum Urbanization.

Within Point Four, housing was a minor programme. According to Andrea Renner's research, Crane was allocated only $600,000 for housing, constituting 70% of the budget he had initially requested. In comparison, health assistance received $17 million, and smaller programmes like education and transportation received $6 million and $3.5 million, respectively —significantly surpassing housing.[22] Despite this constrained budget, Crane endeavoured to propagate his ideas, concentrating on expanding the strategy of aided self-help and low-cost construction methods. He did so by backing the USOM's housing consultants from the IHS and supporting the establishment of institutions such as CINVA in collaboration with architects like Anatole Solow and Leonard Currie. His consultancy to the UN, accentuated by his relationship with Weissmann, also marked a significant contribution. Nevertheless, Crane was nearing the end of his career in government institutions by this time, retiring around 1954. Yet, he remained connected to Puerto Rico in particular and Latin America in general as a housing expert for several years.

19 Crane, *Worker's Housing in Puerto Rico*, 14-5, 21-2.
20 Adrián Gorelik, *La ciudad latinoamericana: Una figura de la imaginación social del siglo XX* (Buenos Aires: Siglo XXI Editores, 2022), 104.
21 Muzaffar, 'The Periphery Within', 66-82; Renner, 'Housing Diplomacy', 61-72.
22 Renner, 'Housing Diplomacy', 43-4.

UN housing missions

Ernest Weissmann started working for the UN at its inception in 1945. As early as 1944, he was part of the United Nations Relief and Rehabilitation Administration (UNRRA), which later became part of the UN. He then headed the HTCP from 1951 to 1956. According to Harris' research, Crane played a role both in founding this branch within the UN and in securing the selection of Weissmann as its director, who was already aware of the then emerging strategies of aided self-help housing.[23] Weissmann then served as Assistant Director of the UN Bureau of Social Affairs in charge of the Housing, Building, and Planning branch between 1956 and 1965. From both offices he coordinated the travel of experts on missions to developing countries.[24]

Already the November 1950 UN mission Low Cost Housing in South and South-East Asia —also called Mission on Tropical Housing— investigated on the ground, and recommended to governments, aided self-help housing schemes.[25] The latter is not surprising, as Jacob Crane led the mission, which also included Antonio Kayanan, Jacobus Thijsse, and Robert Gardner-Medwin. They visited India, Indonesia, Thailand, Pakistan, the Federation of Malaya and Singapore for three months. Among the many cases they explored, they described the Satellite Community at Faridabad in India, a government pilot project with self-sufficient and aided self-help aspects. It was a master plan to house 40,000 people in five neighbourhood units, prepared by planners and architects from the Ministry of Health. The dwellers were refugees from Pakistan, mostly shopkeepers with no prior knowledge of construction. Even so, they received training and built their houses with walls of hand-made bricks in mud mortar.[26]

23 Harris, 'The Silence', 176-7; Harris, 'A Double Irony', 258.
24 On the role of the UN in housing issues in this period: Liernur, 'Mutaciones'; Muzaffar, 'The Periphery Within'.
25 Jacob L. Crane et al., 'Low Cost Housing in South and South-East Asia', Report of Missions of Experts (New York: United Nations, 16 July 1951).
26 Crane et al., 'Low Cost Housing', 60-1.

Fig.20 Charles Abrams, intimately familiar with the Puerto Rico housing programmes, is shown alongside Luis Rivera Santos. Source: Box 117, Charles Abrams papers, 1923-1970, Cornell University Library, Division of Rare and Manuscript Collections, (heafter designated CU2).

Later, in 1954, Charles Abrams led a UN housing mission to the then Gold Coast, now Ghana, in Africa, where the idea of aided self-help was pursued, introducing a new scheme.[27] Abrams had been a UN consultant since 1952 when Weissmann invited him to investigate international land problems.[28] Abrams, a lawyer from the Brooklyn Law School, was born in Poland in 1902, he arrived in New York with his family as a child, later adopting US citizenship.[29] Throughout his professional career, Abrams advised twenty-one countries in Latin America, Africa, and Asia on urbanism, planning and, in particular, housing.[fig.20] Also on the Ghana mission were engineer Vladimir Bodiansky and architect Otto H. G. Koenigsberger, with whom Abrams shared UN consultancies in Pakistan, Nigeria, the Philippines, and Singapore in the 1950s and early 1960s.[30]

Although Abrams did not refer in his publications to Crane, whom he knew,[31] Koenigsberger had already published in 1951 a review of the Mission on Tropical Housing report, agreeing with the general recommendations on aided self-help housing and indicating that he participated in the Faridabad project.[32] Koenigsberger, a German architect, had worked since 1939 in India, but since the early 1950s he moved to London, where he was part of the founders around 1953 of what was the Department of Development and Tropical Studies of the Architectural Association, transferred in 1972 to University College London as the Development Planning Unit.[33]

Abrams recalls that when they arrived in Ghana with Koenigsberger and Bodiansky, they found that 'the government was recovering from the costly prefabrication hangover resulting from the advice of its enterprising European consultants'.[34] Thus, they proposed what they called the Roof-Loan scheme. In their analysis of the housing programmes implemented by local government, they noted that the rental housing programme, publicly built housing, and a housing loan programme did not reach most of the population: 'those who live in self-built housing. These people represent not only the country's largest building resource but they are the most important group economically, socially and numerically.'[35] According to their study, 80% of the houses in Ghana were built by their occupants. However, self-help methods were not used in the larger population centres.[36] To this end, they proposed

27 Mónica Pacheco, 'Rehearsing Experts and "Inperts": Crossing Transnational Housing Narratives in West Africa', *Planning Perspectives* 37, no. 5 (3 September 2022): 921–48.
28 Charles Abrams, *Man's Struggle for Shelter in an Urbanizing World* (Cambridge: MIT Press, 1964), v.
29 A. Scott Henderson, *Housing and the Democratic Ideal: The Life and Thought of Charles Abrams* (New York: Columbia University Press, 2000); O. H. Koenigsberger, S. Groak, and B. Bernstein, eds., *The Work of Charles Abrams: Housing and Urban Renewal in the USA and the Third World* (Oxford: Pergamon Press, 1980).
30 Abrams, *Man's Struggle*, viii.
31 Harris, 'The Silence', 166.
32 Otto H. Koenigsberger, 'Low Cost Housing in South and South-East Asia', *Planning Outlook* 2, no. 3 (1 January 1951): 17–23.
33 Hannah le Roux, 'The Networks of Tropical Architecture', *The Journal of Architecture* 8, no. 3 (1 January 2003), 351-2.
34 Abrams, *Man's Struggle*, 185.
35 Charles Abrams, Vladimir Bodiansky, and Otto H. G. Koenigsberger, 'Report on Housing in the Gold Coast' (New York: United Nations. Technical Assistance Administration, 26 April 1956), 21.
36 Ibid., 62.

to plan satellite villages around important towns, thereby securing land tenure in low-cost sectors, and fulfilling the 'private property desire' through single-family sites. They then proposed to provide a loan in cash and materials for the construction of roofs, doors and windows, 'no loans should be made for the wall structure'.[37] 'If the roof problem can be solved for them, they could provide the bulk of the labour, skill and materials for the under-structure'.[38] The roof was considered more relevant, as there were sectors where it was not easy to build with local materials, relying on expensive imported parts. Under this scheme, public investment was reduced to covering, through a loan, between a third and a quarter of the cost of a house.[39]

Abrams compiled his housing experience in the 1964 book *Man's Struggle for Shelter in the Urbanizing World*,[40] written during his stay at the Joint Centre for Urban Studies of MIT and Harvard University —in 1965, John Turner arrived at that institution. In separate chapters, he first analyses the concepts of self-help, core housing, and instalment construction, where he outlines his criticisms of the Puerto Rican model, pointing out the delays in construction, the high cost of investment, and the low quality of the housing.[41] He then spends a chapter on the Roof-Loan scheme, indicating that it was a model that could work in contexts of self-help and mutual aid, but had been ignored in aid calculations by national or international agencies.[42] He reports on the progress and expansion of the model in Ghana, where the loan for the roof was finally granted once the families had built the walls, which had an impact on achieving better construction as they were inspected for the loan. Abrams later proposed the scheme in Nigeria and Bolivia, the latter being the case reviewed in the fifth chapter of this part of the thesis.

37 Ibid., 22.
38 Ibid., 21.
39 Ibid., 77.
40 Abrams, *Man's Struggle*.
41 Ibid., 171-2.
42 Ibid., 182-94.

'There is no more fertile ground for revolutionary propaganda than the beleaguered cities of the underdeveloped nations',[43] Abrams wrote at the end of his book, dedicating the last two chapters to land ideologies and the tensions of the Cold War. He advocated, among other issues, 'freedom to own a plot in the urban complex', consistent with the schemes he promoted from the UN.[44] At the time of publishing his book, the US Alliance for Progress —reviewed in the second part of this thesis— was in process, in which he stressed that 'a program that promises land distribution for the masses and individual ownership in the cities could strike a revolutionary note politically more vital than communism'.[45]

*

By 1960, Weissmann wrote about multiple cases of aided self-help housing in rural and urban areas in multiple cultures and countries at different stages of economic growth. In his article, he defines its basic principles and states that the UN should continue to explore and expand it in the period between 1961 and 1965.[46] Some of these stories are expanded in the following chapters through the ideas of aided self-help housing in its itinerary through Latin America, both through trajectories led by USOM and the UN.

43 Ibid., 287.
44 Ibid., 271.
45 Ibid., 290.
46 Ernest Weissmann, 'Mutual Aid in Low-Cost Housing', *Annals of the American Academy of Political and Social Science* 329 (1960): 107-14.

3

Inter-American trajectories of US aided self-help housing missions

In 1953, the Inter-American Housing Centre (CINVA) published the handbook *Manual para la organización de proyectos piloto de ayuda propia y ayuda mutua en vivienda,*[1] a comprehensive account of aided self-help housing in Puerto Rico. Luis Rivera Santos prepared the material with Enrique Bird, Lorenzo Muñoz, and Emilio Dávila —representatives of the Social Programme Administration of the Department of Agriculture and Commerce of the Commonwealth of Puerto Rico. Jacob Crane wrote the foreword, signing as auxiliary assistant to the HHFA and consultant to the UN. He warmly acknowledged the propagation of Puerto Rican housing methodologies such as 'ayuda propia y ayuda mutua con la cooperación económica del gobierno' [self-help and mutual aid with economic cooperation from the government] and the 'solares y servicios públicos' [land and utilities] to Latin American countries, although the latter terminology was not adopted in the handbook's content.

The introduction was written by Leonard J. Currie, the director of CINVA from 1951 to 1956. He briefly highlighted themes that would eventually shape CINVA's focus through his contributions or those of the academic team assembled during his term. Currie, an architect by profession, posited that aided self-help housing could be refined through the 'rationalisation of method, based on well thought out plans of houses and communities'.[2] The latter was built on the concept of 'neighbourhood units,' an idea explored in the second part of this thesis.

1 Luis Rivera Santos et al., *Manual para la organización de proyectos piloto de ayuda propia y ayuda mutua en vivienda* (Bogotá: CINVA, 1953). [Manual for the Organisation of Pilot Projects for Self-Help and Mutual Aid in Housing].
2 Ibid., 11. Translated by author.

Fig.21 Governor Luis Muñoz Marín of Puerto Rico operating a brick-making machine. Source: Luis Rivera Santos et al., Manual para la organización de proyectos piloto de ayuda propia y ayuda mutua en vivienda (Bogotá: CINVA, 1953), 22.

Further on, Currie emphasised that this system was not simply an 'isolated technique for building houses, but a method that implies an aid to the integral and human development of people'.[3] Though the teaching staff under Currie mainly comprised architects, it also included sociologists, social workers, economists, and engineers, among others. The assortment of disciplines gradually cultivated an interdisciplinary perspective on housing issues. Beyond the study of construction techniques, this led to the evolution of concepts like 'community development' or 'acción comunal'.

Finally, Currie offers a subtle critique of the model outlined in the handbook. He expresses his aspiration for the system's application in other countries, emphasizing the use of 'more indig-

3 Ibid., 12. Translated by author.

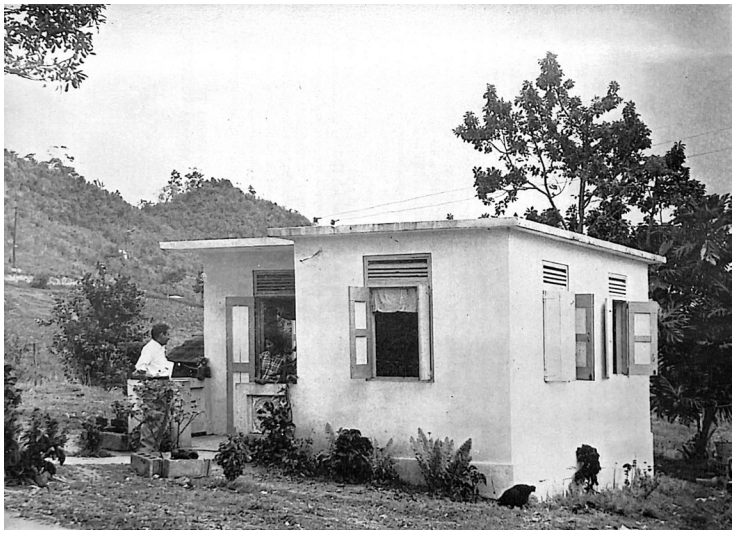


Fig.22 Aided self-help housing Puerto Rico. Source: Rivera Santos et al., *Manual*, 16.

enous building materials and methods'.[4] He advocates for the use of 'adobe, bahareque, wood, guadua and rammed earth'.[5] The handbook, however, only showcases a Puerto Rican case based on the construction of concrete block walls and a concrete slab roof.[figs.21-2]

Despite its title, the handbook is devoted exclusively to Puerto Rico, without mentioning other countries. The only reference to another country, Costa Rica, comes indirectly via a photograph in the book's credits. The photo depicts a child in an informal settlement, with no information provided aside from Currie's authorship. It had previously appeared in a 1951 book he co-edited with social worker Rafaela Espino, focusing on housing in Costa Rica.[6]

4 Ibid., 12. Translated by author.
5 Ibid., 12. Translated by author.
6 Rafaela Espino and Leonard Currie, *La vivienda en Costa Rica. Housing in Costa Rica* (Cambridge: The

The handbook is structured into three sections. The first offers general definitions derived from the Puerto Rican experience. Here, it clarifies that the programme extends beyond mere 'self-help'. It does not simply propose that families independently construct their homes, as might occur in an informal settlement. Instead, it advocates that, given the scarcity of public funds and inefficiencies of traditional methods, the government alone cannot resolve the housing issues of a growing population. Thus, to mitigate public expenditure, 'community action' and 'self-help and mutual aid' were invoked.[7] The latter is defined as 'the deliberate effort of a group of families to come together to study their problems, formulate plans to solve them through their own efforts, and organise themselves for direct action with minimal help from government'.[8] The handbook's second section demonstrates a generic process of developing a housing project, with a strong emphasis on community organisation and collaboration. The third section elaborates on a case study in Puerto Rico, detailing the stages of construction extensively.

Eight years later, in 1961, CINVA published the *Guía de Autoconstrucción*[9] [Aided Self-Help Guide]. In the years between the handbook and the guide's publication, aided self-help housing expanded extensively in Latin America. Puerto Rico is mentioned only once in the guide, on page 133 of 135, and it is included in a generic list of countries where self-help strategies had been implemented. Instead, the guide features three housing projects in Costa Rica, one in Colombia, four in Chile, six in Guatemala, one in Nicaragua, and two in Panama. These projects, developed in urban and rural areas, span various climates and cultures, extending from South America's southernmost part to Central America's northernmost reaches.[fig.23]

architects collaborative, 1951), 39.
7 Rivera Santos et al., *Manual*, 17.
8 Ibid., 17. Translated by author.
9 CINVA, *Guía de Autoconstrucción* (Bogotá: CINVA, 1961).

Fig.23 Countries and corresponding years of aided self-help housing projects, as featured in the 1961 *Guía de Autoconstrucción* published by CINVA. Source: Image by author

The Inception of Aided Self-Help Housing in Latin America

Simultaneously with CINVA's publication of the handbook on the Puerto Rican experience around 1953, the ideas of aided self-help housing began circulating in various Latin American countries. This expansion was supported by US missions, initiated in the context of collaborative exchanges agreed upon following the Point Four programme. As such, US housing consultants gradually disseminated these concepts into programmes developed in Suriname (1952), Barbados (1953), Chile (1955), and Guatemala (1957), among other locations. The 1961 guide illustrates how these ideas materialized in various neighbourhoods, varying in size from 10 to 2,050 houses. Echoing Currie's vision, these projects employed a variety of materials beyond cement blocks, including compressed soil blocks, reinforced concrete, and local timber. Construction methods ranged from straightforward practices to incorporating companies innovating with quickly and easily installable prefabricated elements. These projects aimed to embed the principles of aided self-help housing within these countries' public policies and institutions to facilitate local replicability.

Harold Robinson was among the USOM housing consultants who promoted aided self-help strategies in Latin American countries during the 1950s, although his reports often critiqued this approach. In 1976, Robinson provided an extensive retrospective review of aided self-help housing trajectories. He recounts how Jacob Crane, from the HHFA, amplified Point Four's ideas on international housing assistance. Robinson later stated that 'the first official policy on housing promulgated to the field missions gave emphasis to the concept of aided self-help'.[10] The initial operations of these missions occurred in Suriname and were followed by deployments in Caribbean islands such as Barbados, Trinidad and Tobago, Jamaica, and Grenada. This episode, though relatively unexplored, was documented in 2011 by historian Andrea Renner exploring US archival material.[11]

10 Harold Robinson, *Aided Self-Help Housing: Its History and Potential* (U.S. Department of Housing and Urban Development, Office of International Affairs, 1976), 16.

Renner extensively narrates the journeys of Héctor García Cabrera, a Puerto Rican sociologist, and Donald Hanson, a Chicago-based engineer, across Suriname and the Caribbean for USOM missions.[12] According to her research, Paramaribo was the first to implement aided self-help housing in an urban context, commencing construction in September 1952.[13] This followed the Puerto Rican model in terms of land tenure, with one construction difference. The local climate in Suriname necessitated a pitched roof on timber frames instead of a concrete slab.[14] The housing programme aimed to complete 165 houses in the first year, with the Surinamese government committing to an expansion of up to 400 houses via aided self-help methods.[15]

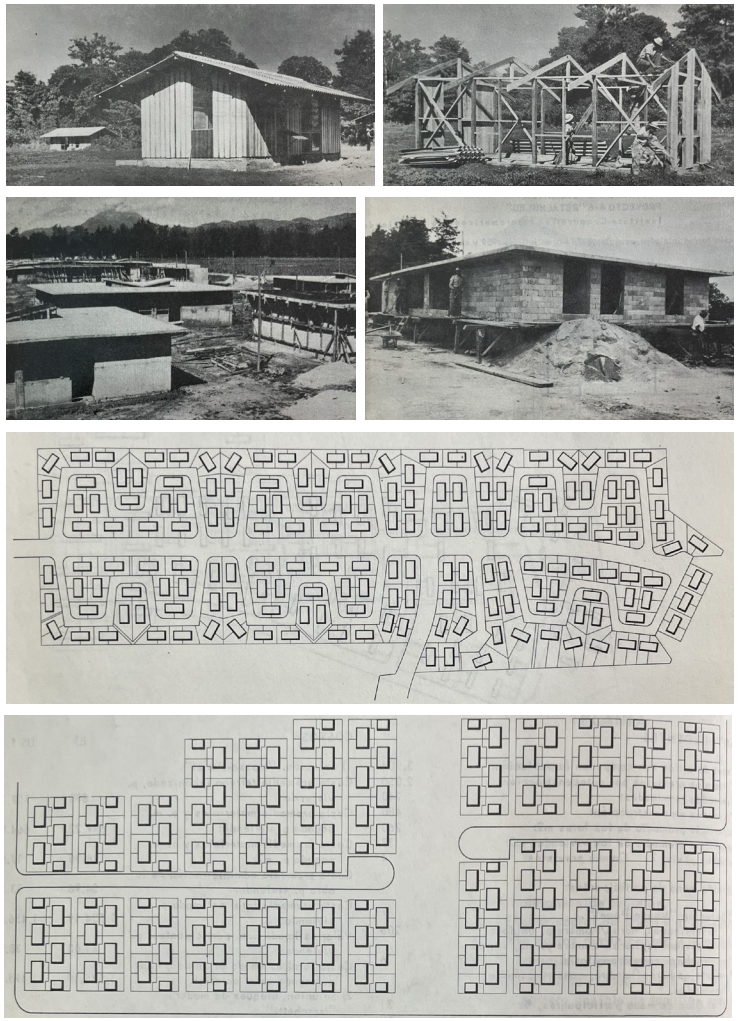
García and Hanson then proceeded to Barbados to advocate for projects which, in 1953, were initiated using block machines tested in Suriname.[16] In 1954, the local government introduced an additional seven aided self-help housing projects.[17] Renner documents how the pair continued their efforts in Jamaica and Grenada, and exploring the utilization of local materials in Trinidad and Tobago.[18] Two further teams joined in 1954 to enhance the programme's outreach within the Caribbean.[19] Renner then transitions her narrative to Guatemala, circa 1956, recounting a significantly larger endeavour perceived as successful by US consultants like Osborne T. Boyd.[20] However, the Chilean experience unfolded between these Caribbean and Guatemalan endeavours.

11 Renner, 'Housing Diplomacy', 52-100.
12 Ibid., 73.
13 Ibid., 78.
14 Ibid., 81.
15 Ibid., 82.
16 Ibid., 85.
17 Ibid., 86.
18 Ibid., 86-7,93,96.
19 Ibid., 93.
20 USAID, *Aided Self-Help in Housing Improvement* (Washington DC: US Department of Housing and Urban Development, 1967), 41-3.

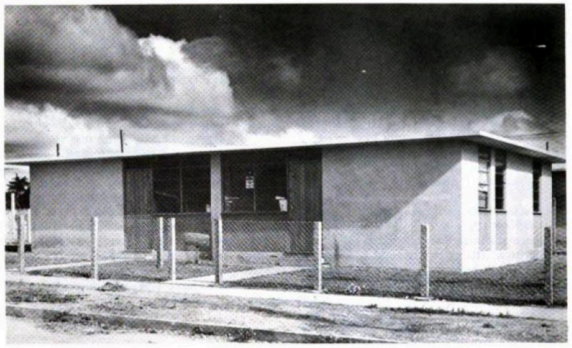
Officially, aided self-help housing in Chile commenced in 1955 with a joint Chilean-US programme, beginning with constructing the Germán Riesco neighbourhood. This effort followed a mission initiated in 1952, led by USOM consultant Osborne T. Boyd. Architectural historian Emanuel Giannotti examined this largely uncharted history[21] —the Chilean case, further explored below, fills a gap in the history of aided self-help housing and sheds light on South-South collaborations that transpired during this period, particularly within a reciprocal framework involving CINVA. The Boyd-backed housing programme, comprising around 650 houses, expanded to approximately 3,600 houses in 1957 under a mission led by Harold Robinson. Concurrently, in 1957, Boyd travelled to Guatemala to consult on aided self-help housing.

Guatemala, a Cold War hot spot, underwent extensive US intervention around 1954.[22] USOM missions responded to housing issues by creating an initial programme in July 1955 involving George Reed and Juan César Cordero Dávila, the executive director of the Puerto Rico Housing Authority.[23] The final programme was drafted in June 1956 by Temple Dick and Walter Harris, a specialist in aided self-help housing and future director of CINVA in 1960 —who also authored the introduction to CINVA's 1961 guide on aided self-help. The first point of the agreement signed between Guatemala and the US prioritized the expansion of aided self-help housing.[24] This programme targeted 3,000 housing units distributed across ten projects in various parts of the country, with neighbourhood sizes ranging from 100 to 1,000 units.[25] figs.24-30 The Colonia Centro América project, comprising 280 houses, initiated construction in 1957.[26] These houses

21 Emanuel Giannotti, 'Aided Self-Help Housing in Chile, 1952-1970' (EAUH Conference 2018, Rome, 2018).
22 Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge: Cambridge University Press, 2007), 146-9.
23 Renner, 'Housing Diplomacy', 121.
24 Ibid., 128.
25 USAID, *Aided Self-Help*, 41.
26 Renner, 'Housing Diplomacy', 137. CINVA, *Guía de Autoconstrucción*, 20-1.



Figs.24-9 Aided self-help housing projects in Guatemala. Source: CINVA, *Guía de Autoconstrucción*, 20-7.



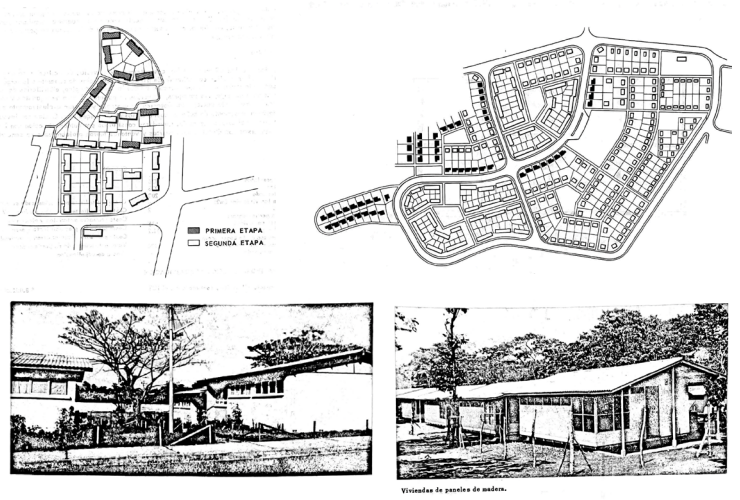
Aided self-help duplex home in Guatemala City (1959)

GUATEMALA

Rural aided self-help home and indigenous hut

42

Fig.30 Aided self-help housing projects in Guatemala. Source: Robinson, *Aided Self-Help Housing*, 42.

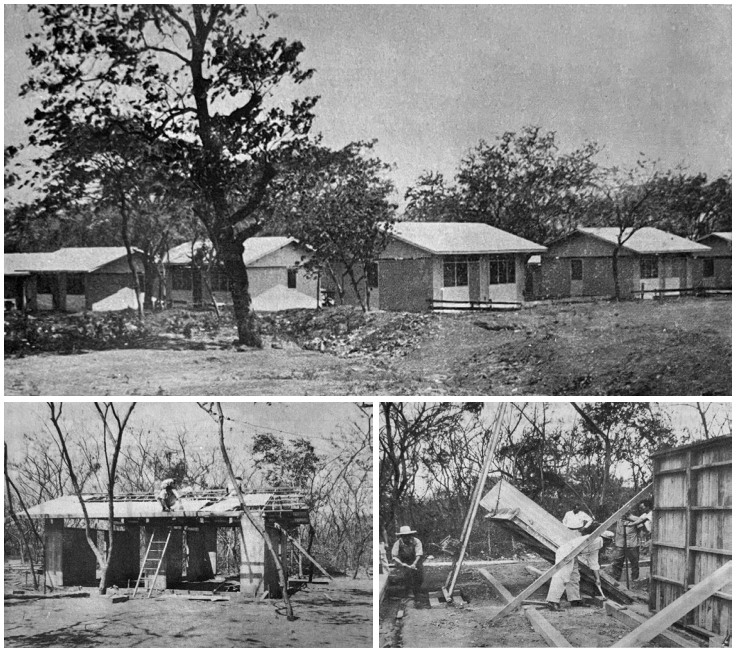


Figs.31-4 Aided self-help housing projects in Costa Rica. Source: CINVA, *Guía de Autoconstrucción*, 6-11.

were modular and constructed from reinforced concrete. Renner recounts that Dick and Harrison visited projects in nearby Costa Rica and Nicaragua for inspiration.[27]

In Costa Rica, the CINVA guidebook highlights the Hatillo project around 1956 and the San Sebastian complex, which incorporated aided self-help housing constructed using modulated panels of local timber.[figs.31-4] USOM consultant Edmund H. Hoben was involved in these projects before moving on to Chile and Bolivia in the 1960s.[28] During the 1950s, Costa Rican housing experts were connected with CINVA's work due to a variety of factors, including prior consultancies performed by Anatole Solow and Leonard Currie and connections with César Garcés, a Colombian architect who had worked in the country and was affiliated with CINVA. Additionally, Eric Carlson, who succeeded Currie as the director of CINVA in 1957, was based in Costa Rica. This

27 Renner, 'Housing Diplomacy', 127.
28 Ibid.,127.



Figs.35-7 Aided self-help housing projects in Nicaragua. Source: CINVA, *Guía de Autoconstrucción*, 28-9.

intersection between Costa Rican experts and institutions and CINVA was recently explored in research conducted by Alejandro Bonilla, and is examined in the second part of this dissertation.[29] In 1959, USOM backed a project in Nicaragua consisting of 104 homes. These were constructed using a tilt-up method of reinforced concrete panels with L-shaped corners, enabling families to construct a house within 43 weeks.[30] fig.35-7 Despite being characterized as a labour-intensive operation, the entire process was designed for implementation by individuals with no prior construction training. These people were expected to learn how to construct their homes with minimal training and supervision.[31]

29 Alejandro Bonilla, 'San José, ville globale: Assistance technique, circulation des savoirs et planification urbaine au Costa Rica, 1927-1986.' (Ph.D. Dissertation, Paris, École des Hautes Études en Sciences Sociales, 2021); Alejandro Bonilla, 'Circulación de saberes del urbanismo y redes transnacionales del INVU, 1954-1970', *Revista Reflexiones* 97, no. 2 (December 2018): 87–106.

30 USAID, *Aided Self-Help*, 43-4.

31 Robinson, *Aided Self-Help Housing*, 19.

Though the projects in the 1950s were specific and limited, they aimed to embed aided self-help housing concepts within public policies and academic institutions for local replication. A significant shift occurred in 1961 with the implementation of the Alliance for Progress, resulting in a substantial increase in aided self-help housing projects due to direct financial investment from the US into Latin America. This funding facilitated the system's expansion to more countries and through larger projects, a topic explored in the second part of this thesis. In Colombia, these funds financed Ciudad Techo, a project where CINVA focused its updated aided self-help housing courses, utilizing tools such as the 1961 guide.

*

While Puerto Rican staff produced the 1953 CINVA handbook, the 1961 guide predominantly featured material compiled by Chileans Eduardo Guzmán Bravo and Guillermo Loveluck, the latter serving as the head of Corporación de la Vivienda's [Housing Corporation CORVI] Office of Aided Self-Help Housing in Chile. The trajectories of CINVA and CORVI intersect, with architects and engineers who studied at CINVA later taking up roles in or advising CORVI, and Chileans from CORVI or other local housing institutions teaching at CINVA. Beyond Guzmán and Loveluck, others Chileans like Patricio Pinto Stevenson, Raúl Ramírez, Helga Peralta, Augusto Enteiche, and René Eyheralde followed paths that crisscrossed between Colombia and Chile, making stops in various Latin American countries during the 1950s and 1960s.

Next, Chilean-US aided self-help housing programme is reviewed, underscoring North-South exchanges with the US and South-South collaborations with CINVA.

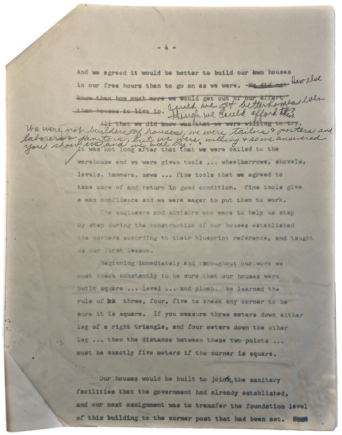
Fig.38 Stills from the film *Housing Adventure in Chile* depicting the design and aided self-help construction process of the Germán Riesco neighbourhood in Santiago, Chile. Source: *Housing Adventure in Chile* (US International Administration Cooperation. Housing Division, 1958), RG306, Moving Images Relating to U.S. Domestic and International Activities, NARA.

US housing adventure in Chile

> My neighbours call me Miguel... and they ask me many questions. [...] 'Miguel,' they would ask, 'why is it that we can have no better homes than these?' [...] We did not know that the United States had brought to our country a plan ... a plan that would change our whole way of life ... our whole outlook ... and make it possible for us to accomplish what we could never do alone ... and unaided. We did not know that we would be taught how to build our own homes ...[32]

This passage is extracted from the 1958 film *Housing Adventure in Chile*, produced by the Housing Division of the ICA and propagated by the US Information Service to endorse US-backed aided self-help housing initiatives globally.[fig.38] The film documents the construction of Santiago's Germán Riesco neighbourhood, the first in Chile to be developed through a government-endorsed aided self-help housing scheme with financial and technical support from the US. The narrative, voiced by a resident whose authorship remains uncertain, illustrates the programme's fiscal implications, individual undertakings, and homeowner benefits.[33] The script highlights the dilemma over unpaid labour hours during construction, eventually arguing that it was the sole path to homeownership without enduring over fifty years of waiting: 'we had to agree that there was no evil in not being paid to build our own homes' Miguel narrates.[34]

32 ICA, 'Housing Adventure in Chile. Movie Script', 1958, 1,3 Folder Housing Adventure in Chile, Box 15, RG306, Movie Scripts, National Archives and Records Administration, College Park, MD (hereafter designated NARA)
33 The scripts with the narration have several corrections (fig.39). One of the Germán Riesco dwellers recalled this episode as: 'A dweller was sought as an actor, and the North Americans, as they know how to do, wrote the script, set up the plot, and the film was shot.' in: Escalona, 'Comité', 46.Translated by author.
34 ICA, 'Housing Adventure in Chile', 4.



- 4 -

And we agreed it would be better to build our own houses in our free hours than to go on as we were. We did not know then how much more we would get out of our efforts, than houses to live in. Although we could not [illegible]

All that we did know was that we were willing to try, [illegible]

It was not long after that that we were called to the warehouse and we were given tools ... wheelbarrows, shovels, levels, hammers, saws ... fine tools that we agreed to take care of and return in good condition. Fine tools give a man confidence and we were eager to put them to work.

The engineers and advisers who were to help us step by step during the construction of our houses established the corners according to their blueprint reference, and taught us our first lesson.

Beginning immediately and throughout our work we must check constantly to be sure that our houses were built square ... level ... and plumb. We learned the rule of the three, four, five to check any corner to be sure it is square. If you measure three meters down either leg of a right triangle, and four meters down the other leg ... then the distance between these two points ... must be exactly five meters if the corner is square.

Our houses would be built to join the sanitary facilities that the government had already established, and our next assignment was to transfer the foundation level of this building to the corner post that had been set.

Fig.39 Annotated script of the film *Housing Adventure in Chile*. Source: ICA, 'Housing Adventure in Chile. Movie Script', 1958, Folder Housing Adventure in Chile, Box 15, RG306, Movie Scripts, NARA.

The Germán Riesco pilot project was further extended in 1957 with six additional aided self-help housing projects, spanning Chile from the North to Centre-South and from the coast to the Andean foothills. These initiatives were supported by the US Operations Mission in Chile (USOM/Chile) from 1952 onwards, integrating US funding and institutions such as the FOA, ICA, HHFA, and the IIAA. Then, by the mid-1960s, aided self-help housing scheme was implemented extensively nationwide through Operation Site. However, after significant criticism, socialist President Salvador Allende halted the aided self-help housing programme in 1970.

The work of the USOM housing divisions in Chile was recently researched in depth by architect Emanuel Giannotti exploring US archival material, among other primary and secondary sources.[35] His work is briefly unpacked and supplemented below to show the trajectory of US technical assistance in Chile. Giannotti advises against interpreting the exchange of ideas as a simple North-South trajectory, advocating instead for understanding it as an 'inter-American dialogue', an interpretation further explored next.

35 Emanuel Giannotti, 'Aided Self-Help Housing in Chile, 1952-1970' (EAUH Conference 2018, Rome, 2018). The paper presented by Giannotti contains more details on the role played by USOM in Chile in relation to housing issues in general, and aspects of aided self-help housing in particular. This thesis explores only some of the key events and main inter-American collaborations identified by the researcher.

The Basic Agreement on Technical Cooperation, signed between the US and Chile in June 1951, as an outcome of the Point Four Programme, set the stage for knowledge exchange and expert travels.[36] In August 1952, Osborne T. Boyd arrived in Chile, leading the USOM housing division for five years. Boyd, alongside Louis Grandgent,[37] formed part of the teams supported by the HHFA and Jacob Crane.[38] Shortly after he arrived in Santiago, Boyd expressed gratitude to Crane for sending information on wood house framing for experimentation in the country.[39]

Boyd supported the inception of aided self-help housing, triangulating US funding and technical assistance with universities and newly formed government housing institutions. Initially, USOM encouraged research and experimentation, financed training trips, and provided funds for the construction of the Germán Riesco neighbourhood.[40] These ideas were introduced in Chile during a period of growing urban housing deficit, when low-income families were building their own informal housing and housing institutions were reorganizing for emergency measures. This intersection of informality, academia and governmental institutional reconfiguration constituted a fertile field for the spread of aided self-help housing ideas.

In the context of informality and people's ability to build their own homes, the aided self-help scheme Boyd promoted in Chile derived from the Puerto Rican model.[41] It was based on pro-

36 Ministry of Foreign Relations of Chile. Decree 392, July 27th, 1951.

37 Louis Grandgent was part of USOM/Chile since 1953. According to Renner's data, his work focused on nationalization and standardization of construction materials prefabrication of building elements and improved and simplified construction methods, in: Renner, 'Housing Diplomacy', 300. Although it was initially uncertain whether Grandgent would be posted to Chile, Edmundo Thomas, director of the materials research and testing institute at the University of Chile, was hopeful that he would be able to work with his team, in: Osborne T. Boyd, 'Monthly Report of Point Four Housing Operations' (Santiago de Chile, November 1952), 1, Folder Reports - Housing 1952-1955, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA.

38 Renner, 'Housing Diplomacy', 71-2

39 Osborne T. Boyd, 'Letter to Jacob Crane', 1 December 1952, Folder Reports - Housing 1952-1955, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA.

40 Giannotti, 'Aided Self-Help Housing in Chile', 6-8.

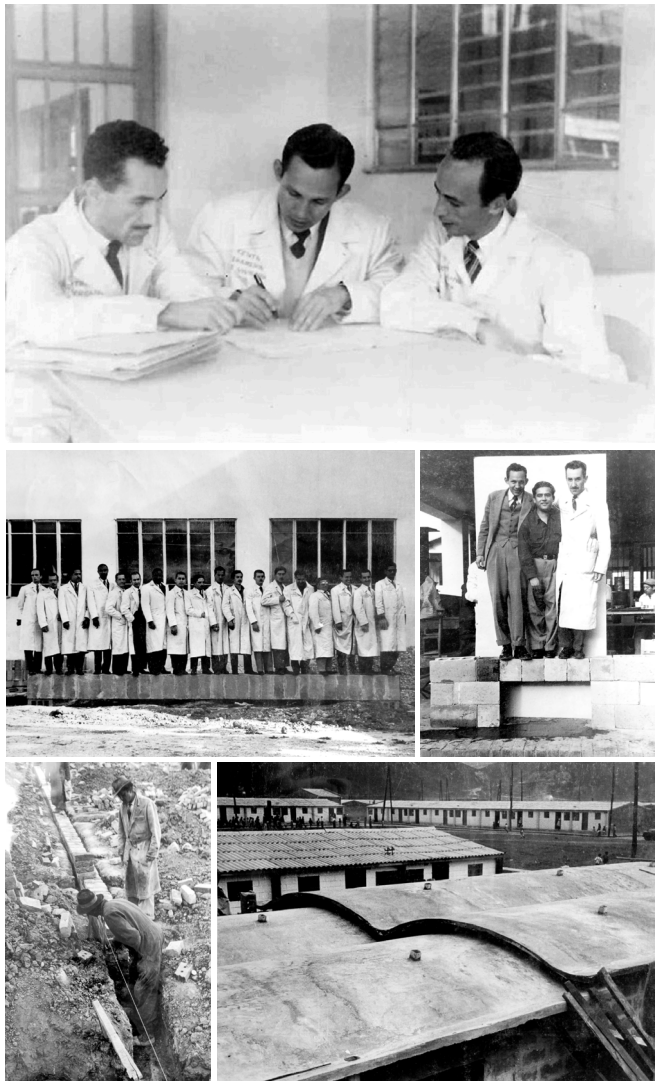
41 Osborne T. Boyd, 'Monthly Report for the Month of April, 1955. Housing' (Santiago de Chile, April 1955), 1, Folder Reports - Housing 1952-1955, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA.

viding families with access to plots, advocating that 'consideration should be given to the tremendous potential force that was in the hands of the people themselves, and the fact that these people were trying to build for themselves with carboard, tin cans, etc.'[42] This reference alluded to the Chilean informal settlements, which began to increase from 1940s onwards. In 1952, over 34,000 'shacks' were noted in various 'poblaciones callampa' in Chile.[43]

Concerning academia's role, a 1953 agreement involved the University of Chile and the Chilean National Health Service. The US was requested to assist in acquiring imported machinery, while the university contributed laboratories and personnel.[44] Concurrently, a voluntary group known as the Centro Científico de la Vivienda [Scientific Centre for Housing CCV] was formed, engaging additional universities and government institutions, among other local participants.[45] An experimental site was instituted on what would later become the Germán Riesco neighbourhood.[46] Alongside the use of standard Chilean brick, new machines were trialled to produce soil-cement blocks.[47]

Chilean architect Patricio Pinto Stevenson worked with Boyd during these initial experiments and provided consultancy services for housing projects in Chillán.[48] Pinto had recently been a student at CINVA in 1952, participating in Colombia in a course on Progressive Development in Housing Design. figs.40-4 This course centred around low-cost housing construction elements and involved practical site application in the Quiroga neighbourhood

42 Osborne T. Boyd, 'Memorandum to Hernando Silva', 17 August 1954, 3-4, Folder Reports - Housing 1952-1955, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA.
43 Corporación de la Vivienda, *Segundo plan trienal, 1962-1964* (Santiago de Chile: CORVI, 1962), i.
44 Boyd, 'Memorandum to Hernando Silva', 2; FOA, 'Chile', c1955, 8, Folder [Western South America Division] Bolivia: Summary Report THRU Chile: Budget, Box 151, RG469, Geographic Files, 1952–1961, NARA.
45 Boyd, 'Memorandum to Hernando Silva', 1; FOA, 'Chile', 8; Osborne T. Boyd and Louis Grandgent, 'Report on Housing' (Santiago de Chile: Institute of Inter-American Affairs, 15 October 1953), 22, Folder Reports - Housing 1952-1955, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA.
46 Boyd, 'Monthly Report for the Month of April, 1955', 1-2; Giannotti, 'Aided Self-Help Housing in Chile', 4.
47 Osborne T. Boyd, 'Monthly Report for the Month of July 1954' (Santiago de Chile, July 1954), Folder Reports - Housing 1952-1955, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA.
48 Osborne T. Boyd, 'Report for January 1956 - Housing' (Santiago de Chile, January 1956), 2,Folder Reports - Housing 1956-1960, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA.



Figs.40-4 (top) (Top) Chilean architects René Eyheralde (left) and Patricio Pinto (right) at CINVA. Source: Escorcia-Oyola, *Cinva*, 89. (middle) Testing of building materials and components in the CINVA laboratory. (bottom) Construction of the Quiroga housing project. Source: Eyheralde, 'Estudio sobre materiales', sheets 31, 76, 159, and 240.

in Bogotá.[49] Pinto also contributed in CINVA to the Neighbourhood Unit León XIII project, dealing with housing and urban design issues, including the incorporation of community facilities.[50] In Chile, Pinto and Boyd presented at the Chilean Association of Architects, where the concepts of aided self-help were well received. Moreover, Pinto received an invitation from the UN to deliver a lecture in Denmark.[51]

Jaime Rodríguez Ortúzar, another Chilean architect, also played a role in introducing foreign aided self-help housing concepts. According to Giannotti, Rodríguez was the first USOM/Chile training programme participant to visit Puerto Rico. He disseminated his acquired knowledge through lectures and local media and publications upon his return to Chile.[52] Rodríguez was granted a scholarship by the HHFA to visit the US.[53] In a report dated May 1954, he reviewed the Puerto Rican scheme of Minimum Urbanisation, which resembled what CORVI was tentatively exploring in Chile. He described it as the demarcation of streets and plots with drinking water access land acquired and parceled by the government.[54] Rodríguez concluded that this 'self-help and mutual aid' strategy should be adopted in Chile, albeit with considerations for local construction techniques and climate, among other factors. Both Pinto and Rodríguez were also members of the Chilean Chamber of Construction (CChC).[55]

Regarding the reorganization of national housing institutions, in September 1953, the Caja de Habitación Popular [Popular Housing Fund] and the Corporación de Reconstrucción y Auxilio

49 René Eyheralde, 'Estudio Sobre Materiales y Métodos de Construcción' (CINVA, 1954), Box 167, Collection Centro Interamericano de la Vivienda - Universidad Nacional de Colombia (hereafter designated CINVA).
50 CINVA, 'Unidad Vecinal Leon XIII: Anteproyecto', Preliminary report (Bogotá: CINVA, 1952), Box 43, CINVA.
51 Boyd, 'Monthly Report for the Month of April, 1955', 2; Boyd, 'Monthly Report for the Month of July 1954', 2.
52 Giannotti, 'Aided Self-Help Housing in Chile', 4.
53 Jaime Rodríguez Ortúzar, 'Informe sobre el período de observación y estudios en el campo de viviendas, hospitales y escuelas de aprendizage para obreros en los EE.UU. de Norte América desde agosto 1953 a Febrero 1954' (Santiago de Chile: Institute of Inter-American Affairs & Servicio Nacional de Salud de Chile, May 1954), 1, Folder Reports - Housing 1952-1955, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA.
54 Rodríguez Ortúzar, 'Informe', 4-5.
55 Cámara Chilena de la Construcción, 'Memoria', 25 June 1952, 8; Cámara Chilena de la Construcción, 'Memoria', 30 August 1958, 19-20.

[Corporation for Reconstruction and Relief] were amalgamated into the CORVI,[56] a development which Boyd had been expecting since 1952[57]. According to Matías Mlynarz's research, this merger was not a complete institutional refoundation but rather a continuation of structural reforms that preserved certain pre-existing policies.[58] These policies aimed to tackle the housing crisis as an emergency, intending to construct as many houses as feasible with minimal economic investment.[59] For instace, Mlynarz's documentation indicates that as early as 1952, the Caja de Habitación had official authorization to outline and urbanise land parcels, subsequently selling these sites without houses[60] —a kind of prequel to aided self-help housing. Germán Riesco was among these projects, with an urban design in place as early as 1952.

At the crossroads of foreign ideas interacting with local initiatives, a Cooperative Housing Programme was established between the Chilean and US governments in June 1954.[61] Implemented under the administration of a Joint Housing Fund [Fondo Común de Vivienda], the programme was tasked with the research and construction of aided self-help housing projects. The Joint Fund was to operate as an agency within the Chilean government, with a representative from both CORVI and the IIAA serving as directors. The agreement outlined four primary activities: Firstly, studies, tests, and materials development for constructing low-cost houses. Secondly, the construction of a model project. Thirdly, an experimental project as part of the Chillán Plan, based on aided self-help and mutual aid principles. Lastly, the establishment of an ongoing programme designed to address the housing problem

56 Luis Bravo, *Chile el problema de la vivienda a través de su legislación (1906 - 1959)* (Santiago de Chile: Editorial Universitaria, 1959). 57-8.
57 Boyd, 'Monthly Report November 1952', 1.
58 Matías Mlynarz, '1953 la hegemonía de la vivienda mínima. La transición entre la Caja y la CORVI' (Master in Architecture, Santiago de Chile, Pontificia Universidad Católica de Chile, 2015), 25-7.
59 Mlynarz, '1953', 10.
60 Mlynarz, '1953', 41-8.
61 'Agreement for a Cooperative Housing Program between the Government of Chile and the Government of the United States of America', 28 June 1954, Folder Chile - Housing - HWH, Box 153, RG469, Geographic Files, 1952–1961, NARA.


ACION

LUNES 5 DE DICIEMBRE DE 1955
SANTIAGO DE CHILE

Se inició programa chileno-norteamericano de vivienda "Esfuerzo Propio y Ayuda Mutua"

100 millones y 70.000 dólares costaran 653 casas definitivas

BANCO NACIONAL DEL TRABAJO SE ABRE EN ENERO

Aprobaron Estatuto del Instituto de Investigaciones Metalúrgicas

reinando

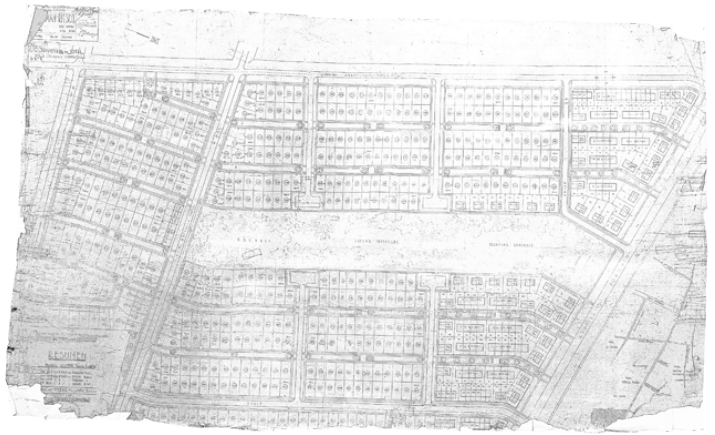
Figs.45-6 (left) The newspaper 'La Nación' featuring the launch of the Chilean-US aided self-help housing programme on its front page. Source: *La Nación*, 5 December 1955. (right) The Germán Riesco housing project, the first project of the programme. Source: USAID, *Aided Self-Help*, 24.

Fig.47 The Germán Riesco neighbourhood as of 2022. Source: Photographed by the author.

in Chile.[62] The Chillán project spanned a considerable period, reaching completion only in 1958 with the construction of eight wooden houses.[63] In contrast, the Germán Riesco neighbourhood project commenced in April 1955, marking the inauguration of the Aided Self-help Housing programme, the first of its kind initiated by a Chilean government.[64]

La Nación newspaper announced on its front page that 'The Chilean-North American housing programme 'Self-Help and Mutual Aid' begins.'[65] fig.45 According to the article, the programme would receive a contribution of 100 million pesos from CORVI to purchase materials, which would be loaned to inhabitants to construct 653 houses. Additionally, $70,000 provided by the US government would be allocated to acquire vehicles, machinery, and other tools. Giannotti's research indicates that the Germán Riesco project played a key role in transforming the perception of aided self-help housing amongst Chileans.[66] The project, based on the 1952 urban design, involved families already living ilegally in the area, having been assigned sites by CORVI following displacement from a nearby settlement.[67] figs.46-50 Initially, houses were constructed using cement blocks supplied by a factory built by the CCV, but a CORVI factory later replaced it. The single-family houses would surround a large central space planned for future parks and community facilities. The houses were completed around 1958. A 2022 mural in the neighbourhood encapsulates the community spirit, reading 'Our grandparents built these houses, we will build the future'.fig.47

62 'Agreement for a Cooperative Housing Program', 3.
63 CORVI, 'Programas de autoconstrucción', n.d., Folder Reports - Housing 1956-1960, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA; Corporación de la Vivienda, *Chile 1960* (Santiago de Chile: CORVI, 1960), 13.
64 Corporación de la Vivienda, *Chile 1960*, 13; Bravo, *Chile el problema de la Vivienda*, 58; Rodrigo Hidalgo, *La vivienda social en Chile y la construcción del espacio urbano en el Santiago del Siglo XX* (Santiago de Chile: RIL editores, 2019), 236-42.
65 'Se inició programa chileno-norteamericano de vivienda "Esfuerzo Propio y Ayuda Mutua"', *La Nación*, 5 December 1955.
66 Giannotti, 'Aided Self-Help Housing in Chile', 6.
67 Giannotti, 'Aided Self-Help Housing in Chile', 5-6; Bravo, *Chile el problema de la Vivienda*, 58-60; CINVA, *Guía de Autoconstrucción*, 12-3; Mlynarz, '1953', 70-4; Escalona, 'Comité'.



Figs.48-50 The Germán Riesco Aided Self-Help Housing Project, Santiago, Chile. Urban plan available at Lo Contador Library, Pontificia Universidad Católica de Chile. Photographs from Robinson, 'Chile's Solution', 36.

In 1957, Osborne T. Boyd travelled to Guatemala to share the knowledge from these projects. The newly formed Inter-American Cooperative Housing Institute was examining the concept of aided self-help housing in Guatemala and would later visit Chile to learn from their experiences.[68]

In June 1957, Harold Robinson assumed the Chief of the Housing Division of USOM/Chile, a position he held until 1959. William N. Womelsdorf, an aided self-help housing advisor, also contributed to the mission.[69] While Boyd's tenure was pivotal in promoting early concepts of aided self-help housing, Robinson's term was instrumental in expanding these ideas through a series of built projects.[70] Despite his critical view that the previous mission had focused excessively on aided self-help strategies, declaring 'it obviously cannot be a panacea for all housing,' his tenure marked a substantial advancement in this approach.[71]

A significant milestone between the pilot project at Germán Riesco and the first major expansion of aided self-help housing in Chile was the allocation of $3 million in PL480 funds from the US for housing investment —PL480 funds are explored further in the second part of this thesis. According to Robinson, these funds were not authorised for use upon his arrival. Consequently, he advised on various reports to expedite approval from relevant political and technical entities, thereby enabling the prompt deployment of the funds.[72] As a result, aided self-help housing projects of various sizes were implemented across diverse climates and topographies throughout the country.

The Chimberos and Buen Pastor projects were located in Arica and Iquique, respectively, two cities in northern Chile char-

68 Renner, 'Housing Diplomacy', 132.
69 Ibid., 300.
70 Giannotti, 'Aided Self-Help Housing in Chile', 7-8.
71 Harold Robinson, 'Chile's Solution to a Global Problem', Final report (Santiago de Chile: USOM/Chile, July 1959), 12, 29.
72 Robinson, 'Chile's Solution', 47-50.

acterized by desert climates.[73] The former consisted of 69 dwellings, while the latter comprised 84 dwellings. Chimberos, constructed of masonry, faced challenges due to a local shortage of bricks. Buen Pastor, meanwhile, was constructed of plaster blocks made by the families. The Compañía de Gas project, located on the challenging slopes of Valparaíso on the central coast, featured 27 duplex dwellings.[74] fig.51

In Santiago, the Clara Estrella project encompassed 1,417 houses. Residents recounted their efforts to build on the plots they acquired, which were initially equipped only with sills and fire taps and lacked electricity or potable water.[fig.53] They acknowledged the technical assistance provided by CORVI and the construction tools supplied by the US.[75] The smaller La Palma neighbourhood resulted in the construction of 215 houses.[76] fig.52 Families initially built a temporary room on the assigned site, then constructed the housing according to the Germán Riesco model.

San Gregorio, also situated in Santiago, represented the first project of an eradication programme, wherein inhabitants of informal settlements were relocated to sites assigned by CORVI.[77] figs.1,2,54-5 The final project at San Gregorio encompassed approximately 4,000 sites, accommodating an estimated population of 25,000 individuals. Initially, 1,034 self-help sites were designated for funding through US resources, though this number eventually escalated to 1,249 according to a CORVI report, while the CINVA handbook

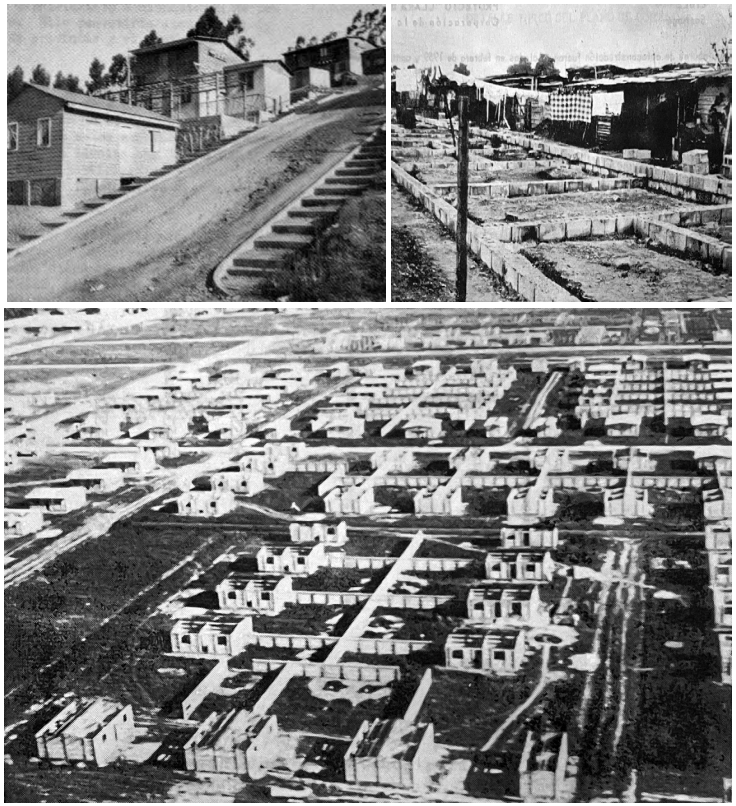
73 CORVI, 'Programas de autoconstrucción'; Carlos Granifo, 'Informes estado de avance obras de autoconstrucción' (Santiago de Chile: CORVI, 30 May 1961), Folder Housing, Box 10, RG469, Unclassified Subject Files 1955 - 1960, NARA.

74 CORVI, 'Programas de autoconstrucción'; Granifo, 'Informes'; Paul Golz, 'Cooperativas de Viviendas en Chile', Final report (Santiago de Chile: USAID, March 1962), 16.

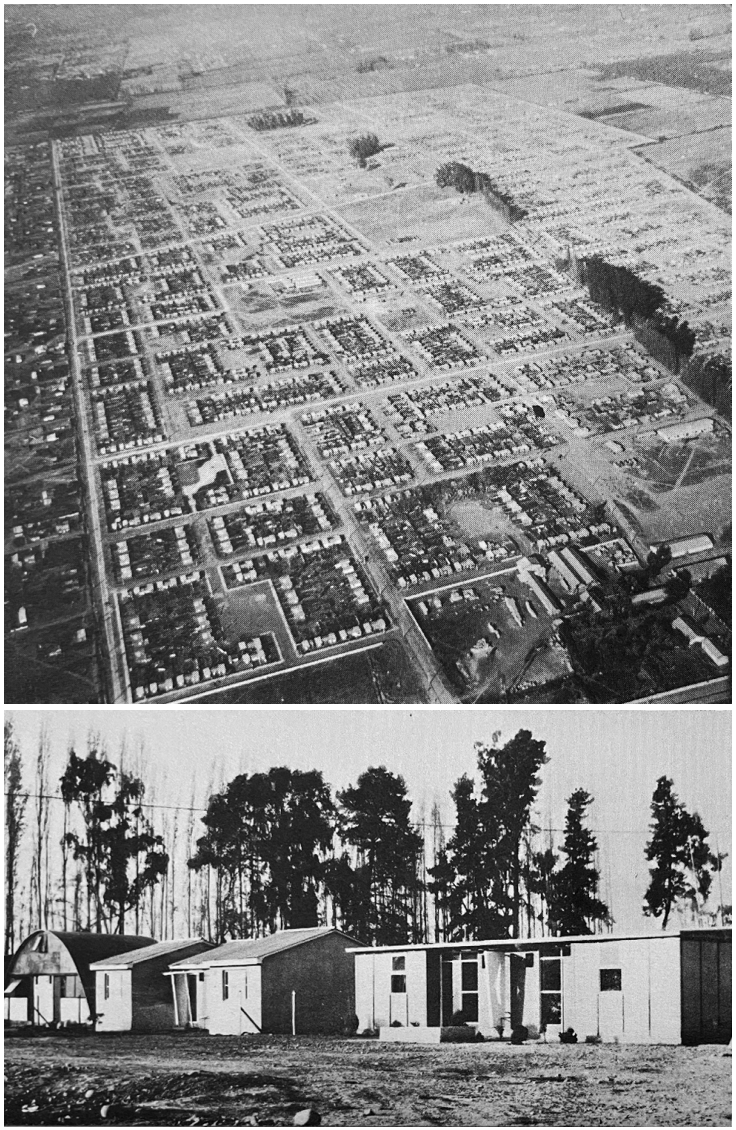
75 CINVA, *Guía de Autoconstrucción*, 16-7; Robinson, 'Chile's Solution', appendix 26, p.4; Edison Hernández and Sandra Vivanco, 'Historia de La Población Clara Estrella', in *Constructores de Ciudad. Nueve Historias Del Primer Concurso 'Historia de Las Poblaciones'*, ed. Luis Solís (Santiago de Chile: Ediciones Sur, 1989), 36–48; Simón Castillo and Waldo Vila, 'La toma de la Victoria y el problema habitacional a través del diario La Nación. Agenda estatal y movimiento de pobladores en Santiago, 1957', *Revista Tiempo Histórico*, no. 21 (December 2020), 113-6.

76 CINVA, *Guía de Autoconstrucción*, 14-5; Robinson, 'Chile's Solution', 49; Robinson, *Aided Self-Help Housing*, 44.

77 Corporación de la Vivienda, *Chile 1960*, 14-5; Luis Bravo, *Chile: el problema de la vivienda a través de su legislación. Plan Habitacional Alessandri* (Santiago de Chile: Editorial Universidad Católica, 1960), 51-3; Hidalgo, *La vivienda social en Chile*, 279-82; Robinson, 'Chile's Solution', 47; Boris Cofré, '"El sueño de la casa propia" Estado, empresarios, y trabajadores ante el problema de la vivienda y urbanización residencial. Santiago de Chile, c.1952-1973' (Ph.D. Dissertation, Santiago de Chile, Pontificia Universidad Católica de Chile, 2015), 195-200; CINVA, *Guía de Autoconstrucción*, 18-9.



Figs.51-3 (top left) Housing project in Valparaíso. Source: (top left) Golz, 'Informe anual', 16. (top right and bottom) La Palma and Clara Estrella's housing projects in Santiago. Source: CINVA, *Guía de Autoconstrucción*, 15, 17.



Figs.54-5 Aerial view of the San Gregorio housing project and an image of 'experimental housing' constructed in the neighbourhood. Source: Corporación de la Vivienda, *Chile - 1960*, 16, 18.

projected that the number of self-help sites could potentially reach 2,050.[78] According to research conducted by Boris Cofré, the positive evaluation of the San Gregorio project by the Jorge Alessandri presidency (1959-64) facilitated the subsequent expansion of the Eradication Programme during his term.[79]

San Gregorio's dwellings were constructed using various techniques. The Marchetti system, which utilized wood blocks, was one such method, noted by Lester Manning, Director of USOM/Chile, for its rapid construction process.[80] With groups of five families working together, the walls of the initial houses were erected within five days. The system, developed by Enrique Marchetti, received financial backing from William L. Graham, a businessman based in Wichita, Kansas, US.[81] These innovations were part of a CORVI experimental housing initiative, which encouraged architects, builders, and engineers to submit proposals for the construction of affordable housing.[82] fig.55

During the construction of San Gregorio in March 1960, US President Dwight E. Eisenhower was filmed visiting the neighbourhood and engaging in conversation with José Donoso Ortega, one of the residents.[83] A February article in the New York Times had previously alluded to the President's upcoming visit to San Gregorio, stating that 'a 17-year-old Chilean school boy is building a house of wooden blocks, in the hope that his family would soon be able to move in'.[84] Subsequently, a headline on *La Nación* proclaimed, 'In San Gregorio 'Ike' saw people building their digni-

78 Robinson, 'Chile's Solution', 47; Corporación de la Vivienda, *Chile 1960*, 13; CINVA, *Guía de Autoconstrucción*, 19.
79 Cofré, 'El sueño de la casa propia', 199.
80 Lester Manning, 'Wood Block Construction - Aided Self Help Housing', Airgram, 16 November 1959, Folder Program - Housing 1959, Box 19, RG469, Unclassified Subject Files 1949 – 1961, NARA.
81 Leonard Woods, 'Letter to William Graham, President, Private Enterprise Inc.', 15 September 1959, Folder Program - Housing 1959, Box 19, RG469, Unclassified Subject Files 1949 – 1961, NARA.
82 Luis Bravo, *Casas experimentales CORVI 1959-1962* (Santiago de Chile: Instituto de la Vivienda. Pontificia Universidad Católica de Chile, 1965); Corporación de la Vivienda, *Chile 1960*, 18.
83 *Eyewitness to History* (Firestone Tire and Rubber Company Collection, 1960), Motion Pictures, Collection FRTC, NARA.
84 'Chileans Work on Housing', *The New York Times*, 21 February 1960; also 'Eisenhower Sees Chilean Housing', *The New York Times*, 2 March 1960; 'Texts of Eisenhower's Speeches in Santiago and His Letter to Chilean Students', *The New York Times*, 2 March 1960.

LA NACION

AÑO XLIV — MIERCOLES 2 DE MARZO DE 1960 — SANTIAGO DE CHILE — PRECIO: E° 0,50 — N.o 14.459

LEA HOY:

FUTBOL:

COLO COLO:

STEVENSON:

CARNAVAL:

CATASTROFE:

PROTESTAS:

CRISIS:

CORDIALIDAD:

PRESUPUESTO:

VACUNA:

En San Gregorio "Ike" vió un pueblo que edifica su dignidad

EISENHOWER PALPO EL ESFUERZO CHILENO DE SUPERACION.— DECLARACION CONJUNTA DE AMBOS MANDATARIOS.— SESION ESPECIAL EN EL CONGRESO.— AMPLIAS INFORMACIONES EN PAGINAS 2, 4, 5, 6 y 7)

Apoyamos plan propuesto por J. Alessandri

Figs.56-7 Top and opposite page feature coverage in the Chilean newspaper La Nación of the US President Eisenhower's visit to the San Gregorio housing project. Source: *La Nación*, 2 March 1960.

ty'.[85] fig.57 The article also covered José Donoso, who reportedly built his family's home in a mere 40 hours.[86] A photograph depicted Donoso, Marchetti, and Eisenhower examining the wooden construction system.fig.56 Upon returning to the US, Eisenhower would have reflect on the event, stating:

> I was impressed, for example, by what I saw in Chile. I visited a low-cost housing project. The Government had provided land and utilities. The homeowners were helping one another build the new houses. They will pay for them monthly, over a period of years. Personal accomplishment brought pride to their eyes.[87]

This quote is taken from a paper for the US Senate authored by Willard W. Garvey, another Kansas-based businessman —the paper aimed to strengthen US government support for affordable housing projects in developing countries. Garvey visited San Gregorio shortly after Eisenhower. He was conducting a business trip to explore new markets, which will be examined in the second part of this thesis. The new head of the housing division at USOM at the time, Edmond H. Hoben, invited Garvey to fly over Santiago to identify potential land for low-income housing projects.[88]

Years later, in May 1967, Richard Nixon visited Chile for slightly less than two days on his Latin American presidential pre-campaign tour. Nixon also visited San Gregorio and the near-by Joao Goulart neighbourhood, where he used the CINVA-RAM machine to produce earth-cement blocks.[89] figs.3-4

85 'En San Gregorio "Ike" vio un pueblo que edifica su dignidad', *La Nación*, 2 March 1960.
86 'Aclamo a Ike población "San Gregorio"', *La Nación*, 2 March 1960.
87 Subcommittee on Housing US Senate, *Study of International Housing* (Washington: US Government Print Office, 1963), 193.
88 Edmon H. Hoben, 'Letter to Stanley Baruch', 11 April 1960, Folder Program Housing 1960, Box 19, RG469, Unclassified Subject Files 1949 – 1961, NARA.
89 'Richard Nixon llegó ayer en breve visita', *La Nación*, 9 May 1967.

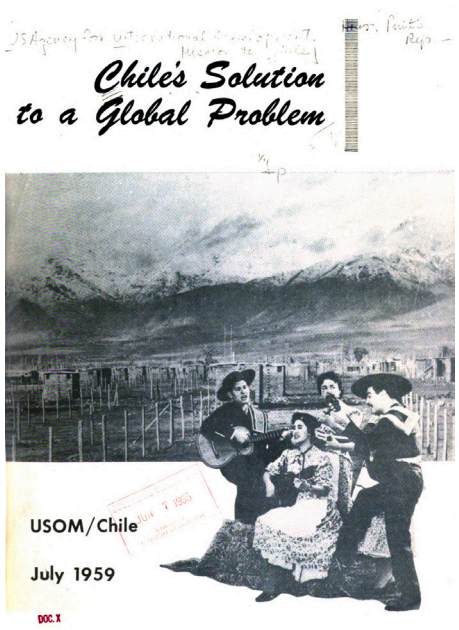


Fig.58 Cover of a USOM/Chile report featuring a collage of the San Gregorio housing project and a band of Chilean huasos. Source: Robinson, 'Chile's Solution'.

The initial observation in Robinson's final report, entitled 'Chile's Solution to a Global Problem,'[fig.58] asserts that by mid-1959, the Chilean government had acquired enough expertise and knowledge over the preceding five years to no longer require additional technical assistance for the development of aided self-help housing.[90] Robinson underscored the establishment of the Office of Aided Self-Help Housing within CORVI, under the leadership of Guillermo Loveluck, who subsequently disseminated this knowledge while teaching at CINVA.[91]

90 Robinson, 'Chile's Solution', 6.
91 Ibid., 12.

In the early 1960s, Hoben assumed the position of Chief of the Housing and Planning Division at USOM. Continuing the work initiated by Robinson, he diversified his office's activities.[92] Substantial US funds were allocated to investigate Savings and Loan institutions —reviewed in the second part of this dissertation. Additionally, following one of the largest earthquakes in recorded history in May 1960, efforts were redirected towards housing reconstruction in Talcahuano, Osorno, and Valdivia. Although attempts to implement aided self-help housing were initiated, by October 1961, these efforts had not yielded significant results.[93] Later, Hoben transitioned to USOM/Bolivia, where he once again crossed paths with Kansas businessman Willard Garvey.

Despite CORVI's efforts to construct new housing projects and support private developments, the housing shortage continued to intensify due to increasing internal migration to Chile's primary cities. In 1962, the housing deficit reached around 300,000 units.[94] By the mid-1960s, the scheme of aided self-help housing was adopted on a national scale as a strategy to address the ongoing housing crisis.

The expansion and pause of aided self-help housing in Chile

The campaign slogan 'Revolution in Freedom' characterized the presidency of Eduardo Frei Montalva (1964-70) and the Chilean Christian Democratic Party. Their governance was shaped by a programme that recognized the theory of marginalization and concentrated on the challenges confronting low-to-middle-income families.[95] Housing was identified as a 'first necessity to which every

92 Edmon H. Hoben, 'Evaluation Review of Activities of Housing & Planning Division', Memorandum, 19 October 1961, Folder Reports - Housing 1961, Box 26, RG469, Unclassified Subject Files 1949 – 1961, NARA. In this period, topics such as Cooperative Housing and City Planning Education were also reviewed, with invited experts such as Francis Violich, see Andra Chastain, 'Francis Violich and the Rise and Fall of Urban Developmental Planning in Chile, 1956-1969', *HIB: Revista de Historia Iberoamericana* 4, no. 2 (2011): 10–39.
93 Hoben, 'Evaluation Review', 19 October 1961, 5.
94 Corporación de la Vivienda, *Plan habitacional Chile* (Santiago de Chile: CORVI, 1963), 102.
95 Mario Garcés, *Tomando su sitio: el movimiento de pobladores de Santiago, 1957-1970* (Santiago de Chile: LOM, 2002), 240-58; Hidalgo, *La vivienda social en Chile*, 293-9; Eduardo Palma and Andrés Sanfuentes, 'Políticas estatales en condiciones de movilización social: las políticas de vivienda en Chile (1964-1973)', *Revista EURE*

family has a right, in which the house must be within reach of all families whatever their socio-economic level.'[96] The establishment of the Ministry of Housing and Urbanism in 1965 was a significant development.[97] The Frei administration presented an ambitious national housing programme intending to construct 360,000 units from 1964 to 1970.[98]

In response to an escalating urban housing crisis, exacerbated by a major earthquake in March and severe storms in August, an emergency housing programme called Operation Site was launched in August 1965.[99] The programme followed an aided self-help housing scheme and aimed to provide 10,000 houses within six months.[100] By September 1967, Operation Site had transitioned into a national housing policy, serving as the most basic option of the Popular Savings Plan.[101] Nicknamed Operation 'Chalk,' this programme provided families with access to plots outlined with chalk on 'semi-urbanised' sites.[102] By 1970, it had provided approximately 71,000 sites, although

- *Revista de Estudios Urbano Regionales* 6, no. 16 (7 October 1979), 32-43; Partido Demócrata Cristiano, *Un Programa y un Gobierno* (Santiago de Chile: Editorial del Pacífico, 1967), 19-21, 110-5.

96 Edwin Haramoto, 'Chilean Housing Experience. A Need for Re-Appraisal', *Planning Outlook* 21, no. 1 (1978), 21.

97 Hidalgo, *La vivienda social en Chile*, 299-316.

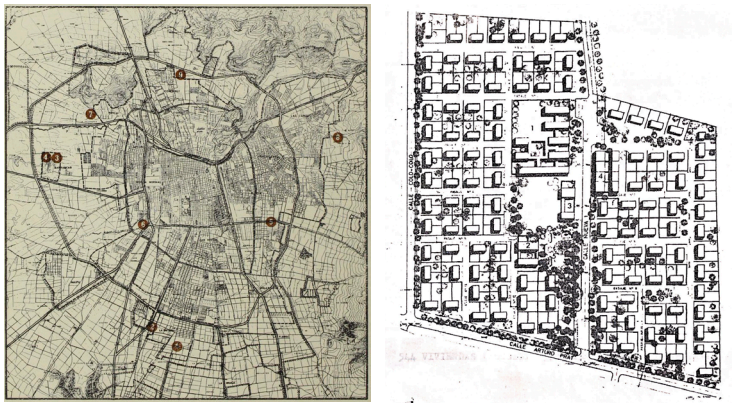
98 Fernando Kusnetzoff, 'Housing Policies or Housing Politics: An Evaluation of the Chilean Experience', *Journal of Interamerican Studies and World Affairs* 17, no. 3 (1975), 291.

99 Supreme Decree 950, August 6, 1965, quoted in María Teresa Aspe, 'La "Operación Sitio" dentro del Problema Habitacional Chileno' (Degree thesis for journalism certification, Concepción, Universidad de Concepción, 1966), 22-3. Up to July 1965, around 22,000 and 15,000 temporary emergency housing units were built because of the earthquake and storms, respectively, in Antonio Labadía Caufriez, Raimundo Guardia Elagart, and Emilo Recabarren Solar, *Evaluación financiera del programa de inversiones corvi para el período enero-mayo 1965 y sus proyecciones para el resto del año* (Santiago de Chile: Centro de Planeamiento y Estudios Económicos, 1965), 37. On Operation Site see: Cofré, 'El sueño de la casa propia', 267-301; Garcés, *Tomando su sitio*, 301-12; Emanuel Giannotti, 'El sitio y la vivienda. Una disputa en torno a la Operación Sitio', in *Por barrios obreros y populares. Actores urbanos. Santiago, Siglo XX*, ed. Boris Cofré (Santiago de Chile: Ediciones Escaparate, 2016), 81–104; Emanuel Giannotti, 'Sapere tecnico e cultura cattolica. Politiche della casa e della città in Cile, 1957-1970' (Ph.D. Dissertation, Venice, Università Iuav di Venezia, 2011), 59-114; Emanuel Giannotti and Hugo Mondragón, 'La inestabilidad de la forma. Proyectos para barrios populares en Santiago de Chile, 1953-1970', Bitácora Urbano Territorial 27, no. 1 (2017): 35–46; Hidalgo, *La vivienda social en Chile*, 316-331; ; Francisco Quintana, 'Urbanizando con tiza', *ARQ (Santiago)*, no. 86 (2014): 30–43.

100 Some data on the first months of Operation Site in: Corporación de la Vivienda, 'Labor desarrollada en 1965 por los subdepartamentos de: fomento, préstamos, cooperativas, y sección de autoconstrucción' (CORVI, 1966), Box 75, Charles Abrams papers 1923-1970, Cornell University Library, Division of Rare and Manuscript Collections, (hereafter designated CU2).

101 Supreme Decree 553, 26 September 1967, MINVU. Antonio Labadía, 'La "Operación Sitio". Una solución habitacional de desarrollo progresivo', *Revista Mensaje*, no. 192 (1970), 429.

102 Palma and Sanfuentes, 'Políticas estatales', 37.



Figs.59-60 (left) (Left) Location of select Operation Site projects on the periphery of Santiago. Source: *Revista AUCA*, 1966, 44. (right) The Renca neighbourhood under the Operation Site programme. Source: Paul Kennon, 'Report to the Ford Foundation' (Santiago de Chile: School of Architecture. Rice University, May 1966).

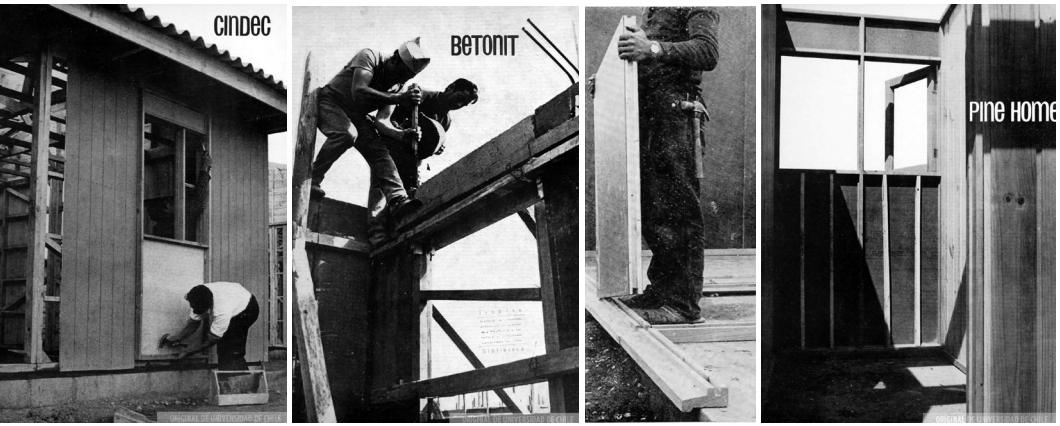
some estimates place this figure as high as 120,000.[103] The projects located in Santiago were primarily situated on the periphery, where land was cheaper.[104] fig.59

During this period, the Ford Foundation (FF), with John Friedmann, provided advisory services to the Chilean government and carried out academic activities in the country. For instance, Rene Eyhéralde consulted on the inclusion of a Rural Housing Office within the Ministry of Housing and Urbanism, while, Friedmann configured the Interdisciplinary Urban Development Committee (CIDU), a centre for training, research, and technical assistance at the Pontificia Universidad Católica de Chile (PUC).[105] In March 1966, Friedmann invited Ernest Weissmann and Charles Abrams as consultants to the FF programme. After

103 Data from the Ministry of Housing and Urbanism in 1970 and 1972 quoted in Garcés, *Tomando su sitio*, 308, and in Edwin Haramoto, 'La necesidad de información en el proceso habitacional chileno', *Revista AUCA*, no. 39 (1980), 30; Labadía, 'La Operación Sitio', 431. Cofré's research indicates that 70,000 units were part of Operation Site, although 127,105 sites were urbanized in the period, so the figure given depended on the understanding of the housing programme, in Cofré, "El sueño de la casa propia", 296-7.

104 Hidalgo, *La vivienda social en Chile*, 320.

105 'Monthly Report, August 1965. Urban and Regional Development Program in Chile' (Santiago de Chile: The Ford Foundation, August 1965), 5, Box 75, CU2; Alejandra Monti, 'De la planificación como técnica a la cultura de la planificación. John Friedmann en Chile', *EURE. Revista Latinoamericana de Estudios Urbano Regionales* 46, no. 137 (2020), 29.



Figs.61-4 Prefabricated elements used in Operation Site projects. Source: *Revista AUCA*, no. 4 (1966), 44, 53, 57, 62.

interviewing 'over 100 government officials', their recommendations were positively received by Modesto Collados, the Minister of Housing and Urbanism.[106]

In his succinct report, Abrams, who had been briefed about Operation Site among other housing programmes, posited that 'the real question in my opinion is not housing versus no-housing, but rather how to get the maximum housing production with the least outlay, the minimum strain on the nation's budget, and the minimum amount of imports.'[107] His remarks echoed those he had previously made in Bolivia, as will be seen below.

The aided self-help housing scheme took various forms in Operation Site, resulting in diverse implementation approaches. Some projects, like the El Bosque neighbourhood, failed to progress beyond the initial stages, merely providing a sanitary core on the site.[108] Others were part of the government's 20,000/70 plan, which consisted of resident-run factories in sufficiently large neighbourhoods, set up to prefabricate the elements needed to build their homes.[109] One example was the Peru neighbourhood where families were expected to fabricate lightweight concrete panels.[110] However, this programme was prematurely discontinued.

Certain projects utilized prefabricated components supplied by construction companies to expedite and simplify assembly. Cindec employed a system of pinewood and drywalls, while Betonit provided prefabricated concrete walls, as observed in the Conchalí neighbourhood.[111] figs.61-2 The latter method was also utilised to construct 550 houses in the Colón Oriente project. Prensomat employed poplar panels lined with cholguán —a local type of wooden hardboard— in the Cisterna II and Renca neighbourhoods.[112] figs.60,63

The Villa La Reina neighbourhood serves as a distinct example of aided self-help housing.[113] Under the leadership of architect Fernando Castillo Velasco, who served as the Mayor of the La Reina municipality in Santiago and a professor at PUC, this project was initiated. Distinct from Operation Site, this endeavour represented a collaborative effort between local government, universities, and the community. Residents were actively engaged in the project's design, management, and construction stages. Initial designs, developed by an architecture studio led by professors Castillo Velasco and Mario Pérez de Arce, proposed terraced houses, but the community advocated for detached houses.[114] As a result, the plots were rotated relative to the street to render the house edge visible.fig.65-6

106 'Monthly Report, March 1966. Urban and Regional Development Program in Chile' (Santiago de Chile: The Ford Foundation, March 1966), 1, Box 75, CU2; John Friedman, 'Letter to Charles Abrams', 5 April 1966, Box 34, CU2.
107 Charles Abrams, 'Letter to John Friedman', 5 August 1966, 2, Box 34, CU2.
108 Edwin Haramoto, 'Casos de Conjuntos entre 1950/85', *Revista CA*, no. 41 (1985), 88-9.
109 20,000 houses to be initiated in the year 1970. Corporación de Servicios Habitacionales, *Operación 20.000/70* (Santiago de Chile: CORHABIT, 1970).
110 Haramoto, 'Casos', 90-1.
111 Haramoto, 'Casos', 84-5; 'Cindec sistema', *Revista AUCA*, no. 4 (July 1966): 43–48; 'Betonit sistema', *Revista AUCA*, no. 4 (July 1966): 57–60.
112 'Prensomat sistema', *Revista AUCA*, no. 4 (July 1966): 61–64.
113 María José Castillo, 'Producción y gestión habitacional de los pobladores. Articulación con la política de vivienda y barrio. Trayectoria y problemática actual' (Ph.D. Dissertation, Madrid, Universidad Politécnica de Madrid, 2013), Vol.II, 81-141; Quintana, 'Urbanizando con tiza', 34-40.
114 Camila Cociña, Francisco Quintana, and Nicolás Valenzuela, eds., *Agenda Pública: Arquitectura, Ciudad, Desarrollo* (Santiago de Chile: Cientodiez, 2009), 128.

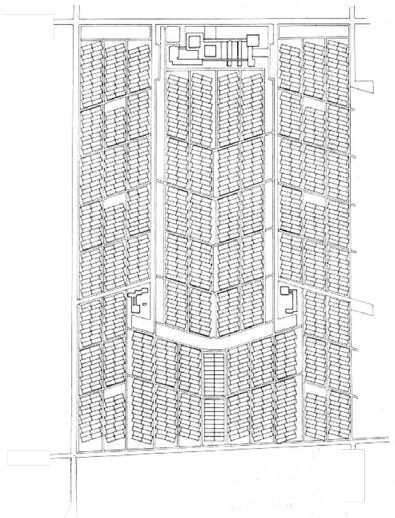


Fig.65 Urban design of Villa La Reina, illustrating the orientation of housing plots. Source: *Revista CA*, no. 41 (1985), 86.

Regarding the urban design, an elementary school and shops were strategically located in front of a main metropolitan avenue, serving as gateways to the neighbourhood and fostering its integration into the city. This layout deviated from the conventional approach of positioning the school at the heart of neighbourhood units. The architects and residents, eschewing large squares due to maintenance and safety concerns, designed several small squares and a wide tree-lined pavement, creating a green buffer along the main interior street.[115]

Although situated in Santiago's periphery, the project catered to families already residing there informally. This approach enabled the families to maintain their existing social networks and employment. Also, a planned adjacent industrial site was expected to provide additional employment opportunities. Considering the municipality was predominantly occupied by high-income families, this project challenged Santiago's most common socio-economic segregation patterns.[116]

115 Eduardo San Martín, 'El programa de autoconstrucción de La Reina (Santiago de Chile)', *Revista DANA*, no. 26 (1988): 69–79.

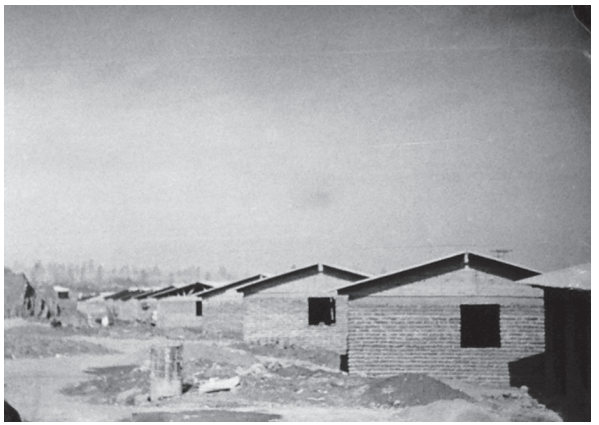


Fig.66 Villa La Reina during construction by the families themselves. Source: Alvarado, 'Auto Construcción', 36.

The Villa La Reina project encompassed a neighbourhood of 1,600 houses. Residents constructed their homes using bricks they made from soil extracted from their sites, benefiting from assistance from the PUC School of Construction and the newly established National People's Training Institute. One critique directed at Operation Site was the delay in building community facilities, an issue not seen in the Villa La Reina project, as the families erected the school in the first year. However, this was just one of the criticisms of those who remained doubtful about the aided self-help housing scheme.

The socialist President Salvador Allende, elected in 1970, discarded the aided self-help housing policy and established a political programme that framed housing as a right of all Chilean families, regardless of their income level, political, ideological or

116 San Martín, 'El programa de autoconstrucción', 69-70.

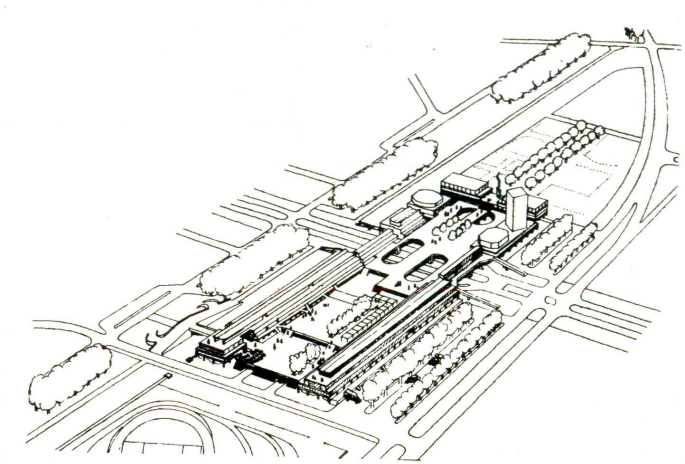


Fig.67 Villa San Luis housing project in Santiago, Chile, propposal by Architect Miguel Eyquem. Source: Miguel Eyquem, *Miguel Eyquem. El proyecto de la obra: de la gravedad a la levedad*, ed. Germán Squella (Santiago de Chile: Ediciones ARQ, 2018), 160.

religious position.[117] Allende's administration shared critiques of initiatives such as Operation Site for producing low-quality housing and limited resident involvement in design and management. The self-help process was seen as a factor that slowed down the execution of works and was inefficient in the use of resources. In addition, the policy was associated with increased social segregation and the abandonment of the construction of community facilities. As a result, Allende's administration discontinued Operation Site, viewing it as socially unjust.[118]

Architect Miguel Lawner, Director of the Corporación de Mejoramiento Urbano [Urban Improvement Corporation CORMU] during Allende's term, noted that while there 'were some attempts at self-help housing projects promoted in the early 1960s, generally backed by the US, as a way of preventing the virus that had meant the triumph of the Cuban revolution from spreading throughout Latin America,'[119] he differentiated these instances

117 Salvador Allende quoted in Palma and Sanfuentes, 'Políticas estatales', 43.
118 Hidalgo, *La vivienda social en Chile*, 358; Kusnetzoff, 'Housing Policies or Housing Politics', 292-3; Palma and Sanfuentes, 'Políticas estatales', 44.
119 Miguel Lawner, interview with the author, 8 February 2021. Translation by author.

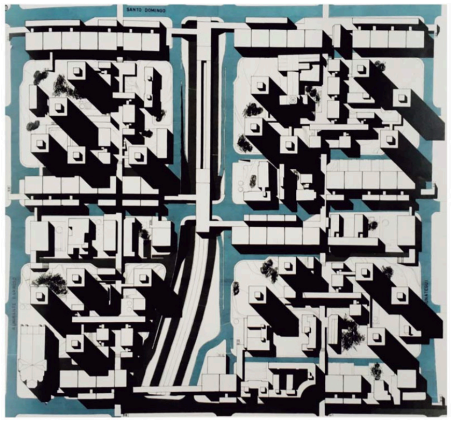


Fig.68 Winning Project of the 1972 Santiago Poniente international urban renewal housing competition. Source: Barry Bergdoll et al., *Latin America in Construction: Architecture 1955-1980* (New York: Museum of Modern Art, 2015), 159.

from Operation Site, especially from Villa La Reina, which he considered successful due in part to its collective approach.

In the early 1970s, the CORMU continued or proposed large urban projects, such as Villa San Luis for affordable housing and an international competition for Santiago's western downtown area, presided over by Aldo van Eyck.[figs.67-8] Despite the grand scale and ambitious scope of these projects, which could be mistaken for utopian, they were realistically grounded.[120] However, their potential was curtailed by Allende's interrupted tenure.

Allende's administration also advocated a system of prefabricated housing. In 1972, following a severe earthquake in central Chile, the Soviet Union donated a housing factory located in the Valparaíso region, near Santiago.[121] The KPD factory —'krupnopanelnoye domostroyenie' or 'large-panel housing construction'— built multi-storey concrete panel neighbourhoods.[figs.70-3]

120 Miguel Eyquem, *Miguel Eyquem. El proyecto de la obra: de la gravedad a la levedad*, ed. Germán Squella (Santiago de Chile: Ediciones ARQ, 2018); Carolina Tobler, 'El proyecto como forma de resistencia. La grilla moderna en el concurso para la Remodelación del Centro de Santiago de 1972' (Master in Architecture, Santiago de Chile, Pontificia Universidad Católica de Chile, 2018).
121 Pedro Ignacio Alonso and Hugo Palmarola, eds., *Flying Panels: How Concrete Panels Changed the World* (Berlin: Dom Publishers, 2019); Corporación de la Vivienda, *Planta K.P.D.* (Santiago de Chile: CORVI, 1972).

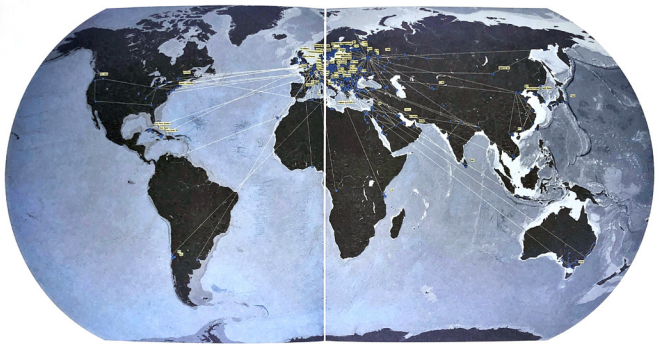
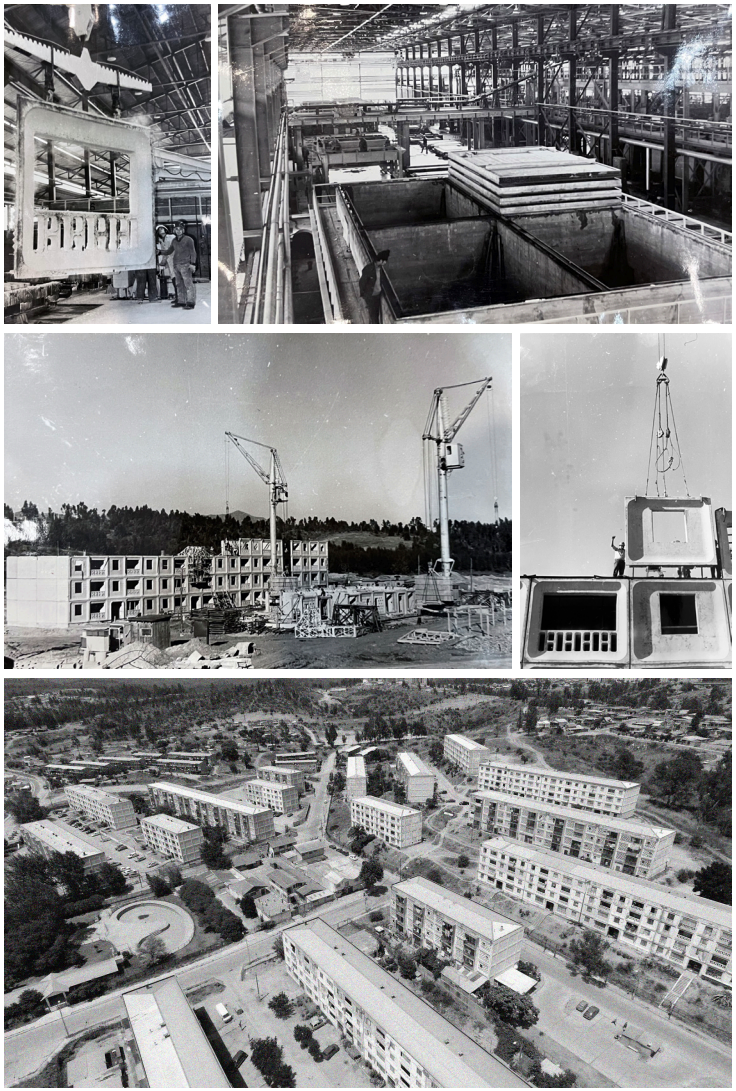


Fig.69 'Global distribution of 98 trajectories of systems'. Source: Alonso and Palmarola, *Flying Panels. How Concrete Panels Changed the World*, 58.

Lawner, however, voiced apprehensions about the suitability of a foreign prefabricated panel housing factory for a seismically active country like Chile.[122] Despite these concerns, these factories, part of a succession of Soviet factories built around the world until the 1980s, adjusted their construction methods to the diverse geographical conditions, as shown by Pedro Alonso and Hugo Palmarola's research.[123] fig.69 Soviet technicians were brought to Chile to train local workers, and modifications, such as reinforced joints, were implemented. During this period, the Villa El Belloto neighbourhood, comprising twenty residential buildings, was built.fig.72-4

In 1973, Salvador Allende's government was overthrown by a military coup, resulting in Allende's death. Lawner was imprisoned for two years on Dawson Island, in the southern region of Chile, before exiling in Denmark. Castillo Velasco went into exile in the UK. Augusto Pinochet, who ruled as a dictator until 1990, implemented a neoliberal political model with US support and advices from economists like Milton Friedman.[124] Under this regime, it was stated that housing was 'a right that is obtained with effort and saving (...) it is not, therefore, a gift from the state as a result

122 Lawner, interview with the author.
123 Alonso and Palmarola, *Flying Panels*.
124 Milton Friedman, *Two Lucky People: Memoirs* (Chicago: The University of Chicago Press, 1998), 591-4.



Figs.70-4 (top and middle) (top and middle) KPD Factory for prefabricated panel housing in Chile. Construction of the El Belloto neighbourhood in the Valparaíso region. Source: Corporación de la Vivienda, *Planta KPD*. (bottom) (bottom) El Belloto neighbourhood with the constructed multifamily housing buildings. Source: 'Reportaje del programa Frutos del País sobre El Belloto', El Belloto Comuna, 6 October 2016, http://www.elbellotocomuna.cl/2016/10/reportaje-del-programa-frutos-del-pais.html.

of the sacrifice of many for the benefit of a privileged few.'[125] The dictatorship amplified the socio-spatial segregation initially incited by Operation Site, particularly after liberalising the land market towards the late 1970s. During this time, dwellers' leaders of Villa La Reina —in its final stages— faced persecution.[126] The KPD factory was appropriated by the Navy before being transferred to the CChC to build affordable housing for the middle classes. The factory was eventually dismantled in 1981.

* * *

This third chapter has covered the inception and trajectories of aided self-help housing through USOM operations aimed at Latin America's lowest-income people, showing its further manifestations and adaptations in Chile. Notably, during the early 1970s, when President Allende suspended the Chilean aided self-help housing scheme, the World Bank initiated its first Sites and Services project in Senegal, a variant of aided self-help housing programmes. These housing operations will be the focus of the third part of this thesis.

The narrative then shifts to CINVA, explored as an academic institution that served as a inter-American hub for the convergence of housing ideas. The chapter focuses on community development, or community action, and aided self-help housing in urban contexts. The roles of Leonard J. Currie and Josephina Albano, among others, are underscored to shed light on these themes, thereby expanding recent histories by examining archival materials, course programmes, manuals, and projects initiated during the CINVA's first period (1951-60).

125 Ministry of Housing and Urbanism quoted in Haramoto, 'La necesidad', 35.
126 San Martín, 'El programa de autoconstrucción', 76-7.

4

CINVA
Inter-American housing crossroads

> The South Americans are very eager to interchange information and to learn from our experience; and I believe that we should arrange for any conferences, exchange of technicians, and the development of an Inter-American 'Housing Center'. More on this later.[1]

In 1941, Jacob Crane foresaw —or began to work towards— the establishment of an inter-American centre for housing. This prediction came from a brief report he wrote upon his return from an inter-American congress of municipalities in Chile and his subsequent visit to neighbouring Peru, Argentina, and Brazil. Crane said that 'in general, the level of technical competence is high, but North Americans and South Americans can learn a great deal from each other on technical problems'.[2]

A decade after Crane's remarks, with his backing from the HHFA, the Inter-American Housing Centre, also known as CINVA, was founded. CINVA's inception on September 18, 1951, resulted from an agreement between the Pan-American Union (PAU)[3] and the Colombian government, which was represented by the Universidad Nacional de Colombia and the Instituto de Crédito Territorial [Institute of Territorial Credit ICT].[4] Anatole Solow, then the head of the Housing and City Planning division of the PAU, played a role in these developments. The hosting by Colombia, rather than other applicant countries such as Bolivia, Brazil, El Salvador, Puerto Rico, and the Dominican Republic,

1 Crane, 'Impressions of Housing in South America', 2.
2 Ibid., 1.
3 The PAU was the General Secretariat of the OAS.
4 CINVA, *Prospecto 1956* (Bogotá: CINVA, 1956), 7-10.

Fig.75 CINVA. Source: Currie, Leonard J. (Leonard James), 1913-1996 (Photographer), "Clausura, CINVA (Inter-American Housing and Planning Center), Bogotá," *Southwest Virginia Digital Archive*, accessed November 18, 2023, https://di.lib.vt.edu/items/show/682.

was probably influenced by the presence of Colombian Alberto Lleras Camargo, the Secretary General of the OAS at the time.[5] Consequently, the centre initiated one of the first postgraduate university programmes in Colombia. The ICT, the third institution involved, was Colombia's main housing institution, starting operations in 1939 with a focus on rural housing and transitioning to urban areas from 1942.[6]

In the years it operated, from 1951 to 1972, CINVA trained 1,159 students from 21 Latin American and Caribbean countries.[7] fig.75

5 CINVA, *Prospecto 1956*, 8.

6 CINVA, *Instituciones de vivienda en Bogotá: Desarrollo y administración*, Administración (Bogotá: CINVA, 1962), 1-19. On a comprehensive history of the ICT, see: Victoria E. Sanchez Holguin, 'Colombia's History of Modern Architecture Revisited Through the Housing Agency Instituto de Crédito Territorial: 1939-1965' (Ph.D. Dissertation, The University of Texas at Austin, 2018).

7 Jorge Rivera Páez, 'El CINVA: un modelo de cooperación técnica 1951 - 1972' (Master in History, Bogotá, Universidad Nacional de Colombia, 2002), annexes 28-48.

CINVA's first director 1951-56

Leonard J. Currie, a Canadian-born architect and US citizen, was the first director of CINVA from 1951 to 1956. His tenure, represented with the work of his academic team, constituted a distinctive first period for CINVA, whose influence could be extended until 1960. His experience in Latin American projects would have been a relevant factor in his appointment. While some sources state that he assumed directorship of CINVA in January 1951, his appointment came somewhat later under some fortuitous circumstances.

On March 5, 1951, 37-year-old Currie wrote to Jacob Crane after learning about an opportunity to work in Burma (now Myanmar) as an architect-planner on housing issues, a project within the scope of the Point Four programme.[8] Although he did not know Crane, Currie asked Carl Feiss, then chief planner of the US slum clearance and community development programme, to introduce him. In his letter to Crane, Currie expressed motivations ranging from interest in vernacular architecture to potential implications in the context of the Cold War:

> I am particularly interested in the study of indigenous construction methods and materials and their application to contemporary problems in the underdeveloped areas of the world. It seems to me that planning and design should be done on the spot, based on studies of local conditions, and that local people should be trained to continue this work. The tendency to utilize local materials, manpower and talents in a grass-roots development spears to me to

8 Leonard J. Currie, 'Letter to Jacob Crane', 5 March 1951, Folder Series II: Personal papers, Box 10, Leonard J. Currie papers, Ms-2007-028, Special Collections and University Archives, Virginia Tech (hereafter designated VTECH).

give great promise in our struggle against the spread of communist ideology.[9]

In a subsequent letter to Feiss, Currie expressed his passion for 'primitive' architecture and regret for constructing 'expensive and inappropriate' buildings in Central America. He criticized the housing constructed by IBEC, a US company, in other countries as 'hot concrete boxes, unsympathetic, using up our critical cement and steel and equipt., and high-priced operators.'[10]

Currie's comments reflected his background as an architect and his professional experience in Latin America. After studying architecture at the University of Minnesota and earning a Master of Architecture at Harvard, Currie was awarded the Wheelwright Fellowship from the latter. This award allowed him to conduct a study trip from 1940 to 1941, in which he examined Spanish Colonial and pre-Columbian architecture in Mexico, Guatemala, and Honduras.[11] During his time in Honduras, he also assisted in the archaeological and restoration work at the Mayan ruins in Copán.[12] fig.76 Between 1942 and 1943, he was drafted into military service by the US, where he oversaw the construction of airports in Nicaragua and Guatemala —the buildings he critiqued in his letter.figs.77-8

On March 14, Crane responded to Currie's letter, stating that he had no job opportunities to offer but invited him to meet in Washington.[13] During this visit, Currie not only met with Crane but also met with Anatole Solow, to whom he wrote in April, stating that he was the ideal candidate for the directorship

9 Ibid.
10 Leonard J. Currie, 'Letter to Carl Feiss', 5 March 1951, Folder Series II: Personal papers, Box 10, VTECH.
11 'Biographical Sketch - Leonard J. Currie', 12 September 1956, Folder Series II: Personal papers, Box 10, VTECH.
12 Gustavo Stromsvik, *Actividades arqueológicas desarrolladas en Copan por el Gobierno de Honduras en cooperación con la Institución Carnegie de Washington* (Tegucigalpa: Secretaría de Educación Pública, 1946).
13 Jacob L. Crane, 'Letter to Leonard J. Currie', 14 March 1951, Folder Series II: Personal papers, Box 10, VTECH.

Figs.76-8 Leonard Currie's works in Honduras (top left), Nicaragua (bottom left), and Guatemala (right). Source: Professional Correspondence File (top left), Box 1 Folder 5 (bottom left), Box 1 Folder 6 (right) Leonard J. Currie papers, Ms2007-028, Special Collections and University Archives, Virginia Tech (hereafter designated VTECH).

of CINVA.[14] Solow responded on May, suggesting that he would consider Currie's application, but CINVA did not have a designated host country at that point.[15] This situation changed soon after. By June, reports indicated Colombia had been selected as the host country, and in July, Solow informed Currie that he was on the shortlist of potential directors.[16]

At the time, Currie resided in Costa Rica, leading a technical mission on housing issues, dispatched by the US government and supervised by the HHFA. Solow, having previously worked in Costa Rica, suggested to Currie that strategies like aided self-help housing could function well in rural areas, although he had reservations about their efficacy in urban settings.[17] In Costa Rica, Currie received support from Colombian architect Cesar Garcés, who worked with Solow and who would later serve as a CINVA professor and act as both deputy director and interim director

14 Leonard J. Currie, 'Letter to Anatole Solow', 14 April 1951, Folder Series II: Personal papers, Box 10, VTECH.
15 Anatole Solow, 'Letter to Leonard J. Currie', 3 May 1951, Folder Series II: Personal papers, Box 10, VTECH.
16 Anatole Solow, 'Letter to Leonard J. Currie', 17 July 1951, Folder Series II: Personal papers, Box 10, VTECH.
17 Ibid.

Figs.79-80 CINVA building in Bogotá, Colombia, as featured in the 1957 Architectural Record: 'The building was designed by the Center's staff, including Leonard J. Currie, A.I.A. (former Director of the Center, who acted as job captain), Guillermo de Roux of Panama (design). Celestino Sanudo of Chile (preliminaries), Herbert Ritter and Eduardo Mejia of Colombia (drawings and specifications). Engineers: Carlos Valencia and Jorge Arias de Greiff of Colombia; landscape design, Leonard J. Currie; builders, A. Manrique e Hijos, Manuel J. Uribe C., of Colombia.' Source: 'Inter-American Housing Center', *Architectural Record* 121, no. 3 (March 1957), 193, 199.

at various times.[18] Currie also became acquainted with the work of Panamanian architect Guillermo de Roux, endorsing it in his book as an approach that could be replicated in Costa Rica.[19] De Roux not only later taught classes at CINVA but also participated in the design of the building that housed the institution, under a team led by Currie.[20] figs.79-80

Currie and social worker Rafaela Espino, wrote an extensive report on housing in Costa Rica, providing recommendations spanning from institutional construction and legislative elements to the advancement of local industries —such as lumber— and proposed options like 'individually owned, aided self-help programs.'[21] They recommended the use of wood or 'bahareque' figs.83-4 —a tradi-

18 César Garcés, 'Resumen de actividades desarrolladas por el CINVA en su primera fase de funcionamiento' (Seminario: Hábitat y Ciudad a 50 años del CINVA, n.d.), VTECH.

19 Rafaela Espino and Leonard Currie, *La vivienda en Costa Rica. Housing in Costa Rica* (Cambridge: The architects collaborative, 1951), 65, Box 11, VTECH.

20 'Inter-American Housing Center', *Architectural Record* 121, no. 3 (March 1957): 193–200.

21 Espino and Currie, *Housing in Costa Rica*, xi.

Figs.81-4 Costa Rica. (top) Government single-family housing project on the left, and Rafaela Espino conversing with occupants of an informal settlement on the right. (bottom) Bahareque constructions. The reverse of the photo on the right states: 'Len Currie in front of a bahareque house, approximately 125 years old.' Source: (top left and right) Box 1 Folder 11, (bottom left) Box 1 Folder 14, (bottom right) Box 1 Folder 15, VTECH

tional method of construction using wood, earth, and plaster— for the construction of these programmes.[22] The report highlighted the social aspects of the programmes, advocating for an integrated approach to housing problems, and suggested the inclusion of housing and health authorities, along with engineering and social work schools. They proposed education programmes for slum dwellers, a resident manager system, and a tenant's association to assist families in organizing improvements for their neighbourhoods.[23] Currie's extensive photographic archive from this period demonstrates his interest in the urban environment, local architecture and construction techniques of Costa Rica, as well as Panama and Puerto Rico.figs.81-8

In a letter from Costa Rica, Currie expressed to Solow his commitment, indicating that if chosen as CINVA's director, he would relocate, selling his house in Lexington and moving to

22 Espino and Currie, *Housing in Costa Rica*, 86-88.

23 Ibid., xii-xiii.

Fig.85-88 (top and bottom left) Photographs of Leonard Currie during his trip to Puerto Rico in July 1951, capturing local architecture and aided self-help housing. (bottom right) A project developed by BUR in Panama, 1951. Source: Box 1 Folder 11, VTECH

Colombia, but no sooner than June 1952.[24] Currie then resided between Kentucky and Boston due to his employment as assistant professor at Harvard, a position he obtained during the period when Walter Gropius headed the architecture department and with whom Currie also worked at The Collaborative Architects.[25] In fact, Currie had prior experience working with Gropius between 1938 and 1940 at the firm Gropius shared with Marcel Breuer. Scholars exploring the history of CINVA have underscored the influence that Gropius, the founder of Bauhaus, may have had on Currie's keen interest in design and constructive aspects, an influence that manifested both in CINVA and his professional career.[26] 'To a notable degree, I have regarded him as a

24 Leonard J. Currie, 'Letter to Anatole Solow', 1 August 1951, Folder Series II: Personal papers, Box 10, VTECH.

25 Walter Gropius, 'Letter to Leonard J. Currie', 5 June 1946, Folder Documents, Box 10, VTECH; *The Architects Collaborative* (Cambridge, MA: The architects collaborative, 1951), Box 11, VTECH.

26 Samuel Jaimes Botía, 'La vivienda en Bucaramanga 1948-1962: Una crítica a la modernidad en Colombia' (Ph.D. Dissertation, Barcelona, Universidad Politécnica de Cataluña, 2020), 158; Rivera Páez, 'El CINVA', 89-100.

Figs.89-91 Leonard Currie's Pagoda House in Blacksburg, US. Source: (top) Box 2 Folder 15, (bottom left) Box 2 Folder 13, (bottom right) Box 2 Folder 14, VTECH

model for much of my own behaviour of the past 27 years,' Currie confided to Reginald Isaacs in 1964, when Isaacs was preparing a book on Gropius.[27] He emphasized Gropius' substantial influence on him both professionally and pedagogically.

Despite consistently holding prominent administrative roles, including Director of CINVA (1951-1956), Head of the Department of Architecture at Virginia Tech (1956-1962), and Dean of the College of Architecture and Art at the University of Illinois (1962-1972), Currie also maintained a parallel professional practice as an architect-designer with a particular interest in construction —a theme echoed in CINVA's educational programme. His architectural accomplishments include his house, Pagoda House, in Blacksburg, Virginia, US, which he designed in 1961 and for which he received numerous distinctions.[figs.90-1]

27 Leonard J. Currie, 'Letter to Reginald R. Isaacs', 27 April 1964, Folder Series II: Personal papers, Box 10, (VTECH).

Fig.92 Leonard Currie and Anatole Solow at a CINVA social activity in June 1953. Source: Box 2 Folder 3, VTECH

The conclusion of this epistolary journey was in a letter from Alberto Lleras Camargo to Currie, dated October 16, 1951, addressing administrative details, thus indicating Currie's appointment was impending.[28] CINVA began operations on May 21, 1952, in Bogotá, with Currie taking up residence in the city. This brief overview of Currie's career may shed light on the technical-constructive emphasis of his tenure at CINVA. It also highlights his appreciation for local cultural aspects and advocacy for an interdisciplinary approach to housing issues. These features were mirrored in the educational programme and faculty, consisting of professionals across the Americas, likely advised by Anatole Solow. As head of the PAU Housing and Planning division, Solow was responsible for CINVA's technical and administrative supervision.[29] fig.92 Notably, Currie's name seldom appears in the programme or course results, where the emphases proposed by the professors for their subjects become more apparent.

28 Alberto Lleras Camargo, 'Letter to Leonard J. Currie', 16 October 1951, Folder Series II: Personal papers, Box 10, VTECH.
29 CINVA, *Prospecto 1956*, 10-1.

The initial academic staff at CINVA comprised architects such as César Garcés and Guillermo de Roux, who focused on neighbourhood unit design, and Argentine architect Ernesto Vautier, who specialized in rural housing.[30] The lone US lecturer, Howard T. Fisher, introduced the concept of Progressive Development in Housing Design, which Chilean architect René Eyheralde later continued.[31] Regarding interdisciplinary representation, Colombian sociologist Orlando Fals Borda, social workers such as the Chilean Helga Peralta and Colombian Lucía Posso, and US historian Caroline Ware augmented the team —albeit Ware mainly lectured during this period. Currie also incorporated Raúl Ramírez,[32] a Chilean engineer who developed the CINVA-RAM block machine, exported globally to aided self-help and low-cost housing projects.[33] The CINVA team also included professionals who held significant administrative or political roles in their home countries, such as Colombian architect Jorge Gaitán Cortés and Peruvian engineer David Vega Christie, whom Crane had previously encountered during his efforts to spread the principles of aided self-help in South America.[34]

Jorge Rivera addressed comprehensive research on CINVA in his 2002 thesis, which highlighted the institution's conspicuous absence from historiography.[35] Even when historian Adrián Gorelik was writing his 2022 book, he noted the lack of published materials on CINVA, citing, among others, Martha Peña Rodríguez's 2010 book on Acción Comunal and Mark Healey's 2019 article that emphasized CINVA's work in rural areas.[36] However,

30 CINVA, 'Unidad Vecinal León XIII. Anteproyecto', Preliminary report (Bogotá: CINVA, 1952), Box 43, CINVA.
31 Eyheralde, 'Estudio Sobre Materiales'; René Eyheralde, *El concepto de desarrollo progresivo en el diseño de la vivienda*, Diseño y construcción (Bogotá: CINVA, 1963).
32 Raúl Ramírez, 'Letter to Leonard J. Currie', 24 May 1960, Folder Series II: Personal papers, Box 10, VTECH.
33 Jorge Galindo-Díaz, Olavo Escorcia-Oyola, and Alleck J. González-Calderón, 'El Centro Interamericano de Vivienda - CINVA y los orígenes de la experimentación con bloques de tierra comprimida (BTC) en la vivienda social (1953-1957)', *Informes de la Construcción* 75, no. 570 (13 June 2023): e503.
34 Harris, 'The Silence', 174.
35 Rivera Páez, 'El CINVA'.
36 Gorelik, *La ciudad latinoamericana*, 146-227; Martha Liliana Peña Rodríguez, *El programa CINVA y la acción comunal. Construyendo ciudad a través de la participación comunitaria* (Bogotá: Universidad Nacional de Colombia, 2010); Mark Healey, 'Planning, Politics, and Praxis at Colombia's Interamerican Housing Lab, 1951

recent years have witnessed an expansion in works exploring CINVA's history, largely owing to the accessibility of the CINVA archive. Comprehensive studies by Samuel Jaimes Botía and Olavo Escorcia extensively cover the institution's varying directorships, academic staff, course programmes, project reports, publications, and influences.[37] More focused analyses have been provided by Galindo, Escorcia, and González who chronicled the history of CINVA-RAM; Nilce Aravecchia, Victoria Sanchez, Amy Offner, and Amanda Waterhouse, who examined the Ciudad Techo project, issues of aided self-help housing, and Acción Comunal, among other CINVA subjects; Alejandro Bonilla, who investigated illuminating encounters and intersections between CINVA and Costa Rica; and Hannah le Roux, who traced the impact of CINVA through an Argentinean architect working in Siyabuswa, a rural settlement in South Africa, along with other authors and texts that have started to fill the historical gap.[38] For the case of Currie's trajectory above, an effort was made to supplement the CINVA archive with archival material located at Virginia Tech.

The following sections reviews CINVA's inter-American views on community development and aided self-help housing, aspects underscored in Jaimes Botía's research through the Siloé and La Fragua projects, as examined through manuals, courses, and reports.[39]

- 1966', in *Itineraries of Expertise. Science, Technology, and the Environment in Latin America's Long Cold War*, ed. Andra B. Chastain and Timothy W. Lorek (Pittsburgh: University of Pittsburgh Press, 2020), 199–216.

37 Jaimes Botía, 'La vivienda en Bucaramanga'; Olavo Escorcia-Oyola, *Centro Interamericano de Vivienda (Cinva), 1951-1972. Aportes a la investigación, al desarrollo de técnicas constructivas y otras contribuciones en Vivienda de Interés Social (VIS)* (Bogotá: Universidad Nacional de Colombia, 2022).

38 Galindo-Díaz, Escorcia-Oyola, and González-Calderón, 'El Centro'; Nilce Aravecchia-Botas, 'Técnica y política en la producción de la ciudad latinoamericana. Ciudad Kennedy, Bogotá (1960-1963)', *A&P Continuidad* 6, no. 11 (2019): 70–81; Amy Offner, 'Homeownership and Social Welfare in the Americas: Ciudad Kennedy as a Midcentury Crossroads', in *Making Cities Global. The Transnational Turn in Urban History*, ed. A. K. Sandoval-Strausz and Nancy H. Kwak (Pennsylvania: University of Pennsylvania Press, 2017), 47–70; Sanchez Holguin, 'Colombia's History'; Amanda Waterhouse, 'Grassroots Architects: Planning, Protest, and U.S. Foreign Aid in Cold War Colombia' (Ph.D. Dissertation, Indiana, Indiana University, 2022); Bonilla, 'San José, ville globale'; Hannah le Roux, 'CINVA to Siyabuswa: The Unruly Path of Global Self-Help Housing', in *Rethinking Global Modernism*, ed. Vikramaditya Prakash, Maristella Casciato, and Daniel E. Coslett (London: Routledge, 2021), 233–50; Óscar Calvo, 'Urbanización y Revolución. Técnica y política en Santiago de Chile, Buenos Aires y Ciudad de México (1950-1980)' (Ph.D. Dissertation, Ciudad de México, El Colegio de México, 2013), 71-81.

39 Jaimes Botía, 'La vivienda en Bucaramanga', 276-84.

Community Development – Acción Comunal

The tenure of Leonard Currie at CINVA was succeeded by Swedish director Eric Carlson, who served from 1957 to 1959. According to Jaimes Botía's research, Carlson endeavoured to familiarise students with administrative and planning functions, potentially a reflection of his background in public administration and expertise in planning.[40] Throughout Carlson's tenure, numerous reviews were conducted concerning housing legislation and institutions in Latin American countries, yielding a comprehensive overview of a decade marked by significant institutional structuring in the region. Additionally, Carlson organized various continental seminars, including one aimed at technicians and officials involved in urban planning, which saw contributions from regional experts such as Carl Feiss, Luis Dorich, and Francis Violich, among others.[41] fig.93

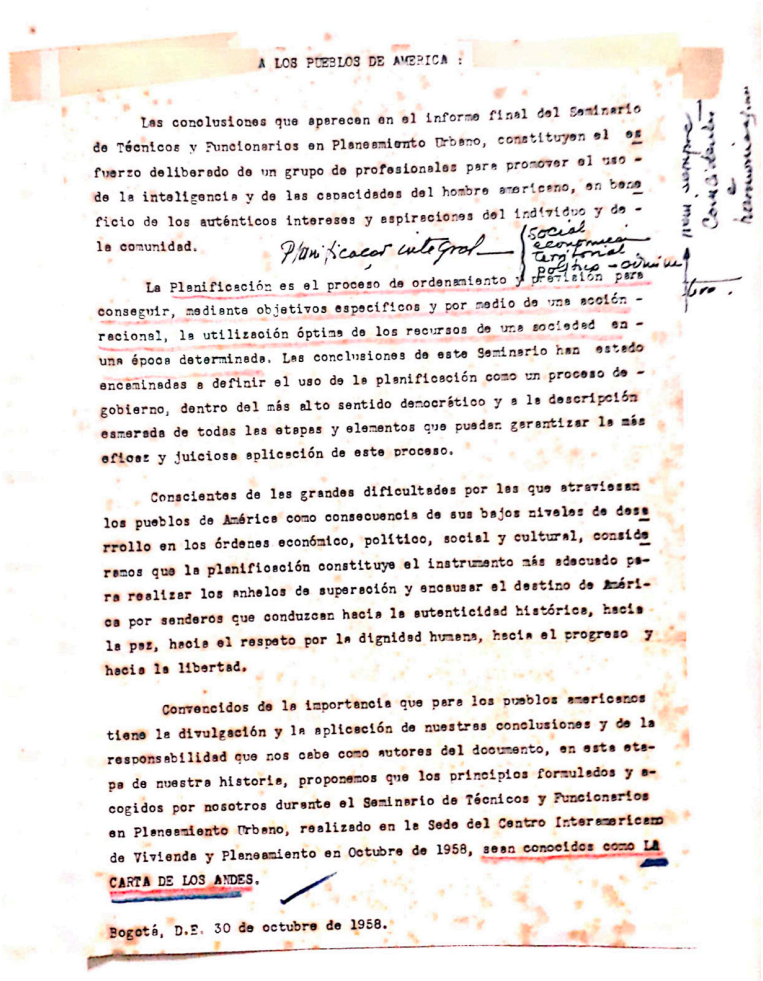
Carlson retained the academic staff and persevered with the technical-construction issues inherent in the early years of CINVA. Yet, his tenure was primarily distinguished by the enhancement of community development and also by aided self-help housing via the execution of projects and recruitment of faculty members such as Josephina Albano, Caroline Ware, Jorge Rivera Farfán, Eduardo Guzmán Bravo, and Eduardo Menéndez. Consequently, under Carlson's leadership, projects like Siloé, executed in 1957, which highlighted a detailed description and implementation of community development methodology, and the La Fragua housing project in 1958, referenced as the first in Colombia to be realized through aided self-help, were undertaken.

The variety of the people involved in the Siloé project alone bears testimony to CINVA's Pan-American diversity and interdisciplinary approach towards community development.[42] The

40 Jaimes Botía, 'La vivienda en Bucaramanga', 277.

41 CINVA, 'Seminario de Técnicos y Funcionarios en Planeamiento Urbano', Final report (Bogotá: CINVA, October 1958), Box 46, CINVA.

42 CINVA, *Siloé. El proceso de desarrollo comunal aplicado a un proyecto de rehabilitación urbana*, Trabajos



A LOS PUEBLOS DE AMERICA :

Las conclusiones que aparecen en el informe final del Seminario de Técnicos y Funcionarios en Planeamiento Urbano, constituyen el esfuerzo deliberado de un grupo de profesionales para promover el uso de la inteligencia y de las capacidades del hombre americano, en beneficio de los auténticos intereses y aspiraciones del individuo y de la comunidad.

La Planificación es el proceso de ordenamiento y previsión para conseguir, mediante objetivos específicos y por medio de una acción racional, la utilización óptima de los recursos de una sociedad en una época determinada. Las conclusiones de este Seminario han estado encaminadas a definir el uso de la planificación como un proceso de gobierno, dentro del más alto sentido democrático y a la descripción esmerada de todas las etapas y elementos que puedan garantizar la más eficaz y juiciosa aplicación de este proceso.

Conscientes de las grandes dificultades por las que atravies an los pueblos de América como consecuencia de sus bajos niveles de desarrollo en los órdenes económico, político, social y cultural, consideramos que la planificación constituye el instrumento más adecuado para realizar los anhelos de superación y encausar el destino de América por senderos que conduzcan hacia la autenticidad histórica, hacia la paz, hacia el respeto por la dignidad humana, hacia el progreso y hacia la libertad.

Convencidos de la importancia que para los pueblos americanos tiene la divulgación y la aplicación de nuestras conclusiones y de la responsabilidad que nos cabe como autores del documento, en esta etapa de nuestra historia, proponemos que los principios formulados y acogidos por nosotros durante el Seminario de Técnicos y Funcionarios en Planeamiento Urbano, realizado en la Sede del Centro Interamericano de Vivienda y Planeamiento en Octubre de 1958, sean conocidos como LA CARTA DE LOS ANDES.

Bogotá, D.E. 30 de octubre de 1958.

Fig.93 Charter of the Andes, Seminar for Technicians and Officials in Urban Planning, held at CINVA in October 1958. Source: Box 46, CINVA.

project was led by UK architect Alec Bright, with Brazilian social worker Josephina Albano serving as co-director. Consultants included Carlson for public administration, Chilean economist Jorge Videla, US architect and urban renewal specialist Carl Feiss, Colombian physician Santiago Renjifo from the Universidad del Valle, and Colombian audio-visual consultant Carlos López Gómez, alongside aforementioned faculty members César Garcés, Raúl Ramírez, and Orlando Fals Borda. The twelve participating students, from Colombia, Mexico, Uruguay, Cuba, Argentina, Brazil, Peru, Venezuela, Chile and Haiti, represented disciplines as diverse as law, anthropology, architecture, social work, economics and engineering. Notably, historian Caroline Ware featured prominently in the project's bibliography with four publications.

Adrián Gorelik, in examining the trajectory of Acción Comunal across Colombia and CINVA, delineates a progression beginning with the regional impact of Caroline Ware's work, subsequently transitioning into the ideation and development of 'action-research' methodologies by Vautier and Fals Borda at CINVA.[43] Gorelik identifies shared approaches among this group, originating from the Puerto Rican experience, much like Ware's influences drawn from the TVA.[44] An active participant in Roosevelt's New Deal in the 1930s, Ware lectured on community development in Puerto Rico in the 1940s, and her work gained exposure through the PAU. Ware's collaboration with CINVA began in 1953 with a series of lectures, a partnership that would extend over time through her publications and the courses she taught in 1959. She also served as an advisor to the District for the establishment of the Bogotá Community Action programme,[45] created with the backing of Jorge Gaitán during the presidency in Colombia of

de clase n.6 (Bogotá: CINVA, 1958); Jaimes Botía, 'La vivienda en Bucaramanga', 275-284; Escorcia-Oyola, *Cinva*, 120-7; Calvo, 'Urbanización y Revolución', 79-80.

43 Gorelik, *La ciudad latinoamericana*, 113-24; Healey, 'Planning'.

44 Gorelik, *La ciudad latinoamericana*, 114-9.

45 Ibid., 117-8.

Alberto Lleras Camargo[46]. This evolution of community development articulated at CINVA can be further explored through the contribution of Josephina Albano.[47]

In addition to co-directing the Siloé project, Albano, along with Fals Borda and Vautier, drafted a manual and taught classes that offered definitions and approaches to community development. In the 1958 publication *Manual de investigación y extensión de la vivienda rural*[48] [Rural Housing Research and Extension Manual], the authors noted that community development necessitated prior understanding of the community and required the endorsement of authorities. They contended that housing should not be viewed as an insular institution but rather as dynamically interconnected with the social structure, whereby an integrated approach to issues would yield communal benefits.[49] From the inhabitants' perspective, the significance of neighbourhood councils, groups or clubs was underscored, and the identification and fostering of natural leadership within individuals were advocated. Regarding the implementation of work, the utilization of audio-visual material for communicating ideas to the community and the employment of mutual aid as a cooperative work strategy for families were emphasized.

The 1958 curriculum for the *Curso básico de introducción a la vivienda de interés social*[50] [Basic course on introduction to social housing] comprises three modules on Social Aspects. Fals Borda examined themes relating to the sociology of housing and cultural aspects, while Vautier explored content concerning rural communities and housing enhancement. Albano supervised the module on community and housing, in which she elaborated ex-

46 Jaimes Botía, 'La vivienda en Bucaramanga', 308-9; Rivera Páez, 'El CINVA',131-4

47 Rafael Soares Gonçalves and Leandro Benmergui, 'Maria Josephina Rabello Albano: uma assistente social transnacional', *O Social em Questão* 1, no. 54 (2022): 111–36.

48 Orlando Fals Borda, Ernesto Vautier, and Josephina Albano, *Manual de investigación y extensión de la vivienda rural*, Preliminary edition, Manuales no.5 (Bogotá: CINVA, 1958).

49 Fals Borda, Vautier, and Albano, *Manual*, 37-8.

50 Orlando Fals Borda, Josephina Albano, and Ernesto Vautier, *Curso básico de introducción a la vivienda de interés social. C. Los aspectos sociales*, Preliminary edition, Enseñanza no.4-C (Bogotá: CINVA, 1958).

tensively on community development, providing more in-depth analysis than in the manual. Using a UNESCO's definition of community development as 'the organisation of broad programmes of social progress based on self-help and local effort, aided (or not) from outside',[51] she outlined various objectives, principles, and stages of a community development programme, mirroring the structure employed in the Siloé project. The stages delineated by Albano included a socio-economic study to comprehend the customs, beliefs, or traditions of the community; a clear problem definition by the community, facilitated by an expert; the formulation of an action plan agreed upon with community leaders; and, ultimately, community organization.[52]

The publication *Siloé: El proceso de Desarrollo Comunal aplicado a un proyecto de rehabilitación urbana*[53] [Siloé: The Community Development Process Applied to an Urban Rehabilitation Project] characterized the project as an experiment in 'urban renewal' in the Siloé neighbourhood, situated within the city of Cali.[54] As an informal settlement of 20,000 residents with substandard housing, public spaces, facilities, and infrastructure, Siloé offered a unique opportunity for an inter-professional team to study housing given its interwoven demographic, urbanistic, and topographic challenges.[55] The project aimed to mitigate public health risks by examining the physical, social, and economic modifications necessary for a high-density informal settlement in an urban context. The project methodology indicated a four-stage process over a ten-week working period: preparation, research, programming, and action.[56]

The Siloé publication provides a comprehensive, detailed account of the community development methodology's imple-

51 Fals Borda, Albano, and Vautier, *Curso básico*, 3-4. Translated by author.

52 Ibid, p.4-6.

53 CINVA, *Siloé*.

54 Ibid., 3.

55 Ibid.

56 Ibid.

mentation, beginning with an exploration of the community to 'awaken in them the desire to know their problems'.[57] It outlines how the community was encouraged to have confidence in itself, as well as in the authorities and the project. Here, the significance of constructing a demonstration project through mutual aid became essential.[58] The report then describes how the community was assisted in organizing itself to address its own issues, including forming a civic committee, among other activities.[59] Finally, it discusses the measures undertaken to ensure the project's continuity.[60] This account presents a model of citizen participation involving community members, municipal authorities, CINVA students, professors, consultants, and faculty from the Universidad del Valle.

The mutual aid demonstration project emerged as a turning point where the contributions of the various stakeholders were intertwined. This solution was conceived after assessing the severity of the problems identified by local residents, coupled with the working capacity of the community and institutions, and the financial resources available.[61] A decision was made to improve a pedestrian access route to the neighbourhood, a project that could be repeated later.[figs.94-6] Improvements included the construction of stepped terraces, retaining walls, steps and tree planting. One of the streets, which led to a water fountain, was also upgraded. When a second group from CINVA revisited the following year, they noted that the improvements had proliferated within the neighbourhood.[62]

The distinctive approach to the project likely prompted the recommendation for neighbourhood 'rehabilitation', thus deviating from strategies such as Land and Utilities in Puerto Rico or the eradication programmes implemented almost simultaneously in Chile. The latter strategies consisted of relocating families from

57 Ibid., 24. Translated by author.
58 Ibid., 26.
59 Ibid., 30.
60 Ibid., 32.
61 Ibid., 22.
62 Ibid., 37-8.

Figs.94-6 Siloé Demonstration Project. (top) The area before the project, featuring a local resident using a loudspeaker to mobilize community participation. (middle) Wall texts and images encouraging community collaboration in the demonstration project. (bottom) Ongoing construction of the road improvement project. Source: CINVA, *Siloé*, 27-9.

informal settlements to new neighbourhoods where they could build their homes with government assistance. Such displacement could result in the loss of employment and social networks for these families and create distance from their schools, among other socio-segregation issues. Conversely, in Siloé, the decision was made in 1957 to maintain the neighbourhood in its existing location, at least temporarily, commencing with improvements to public spaces. This approach pioneered a 'slum-upgrading' housing strategy, moving away from the alternative of 'eliminating Siloé by transferring its entire population to another area and urbanising the hill for higher-income housing'.[63]

These community development strategies, exemplified by the Siloé project, would later be exported to Bolivia by the architect Guillermo Sanjinés Rojas, a former CINVA student from 1958, through the municipality of La Paz.[64] These approaches were put into practice in Bolivia in the mid-1960s, evolving through the 1970s with the support of the World Bank. The development and outcomes of these strategies are explored in the third part of this thesis.

Aided Self-Help Housing

Concurrently with the Siloé project, in 1958, the conception of La Fragua neighbourhood in Bogotá emerged as the first acknowledged aided self-help housing project in Colombia, albeit through a more random series of events.[65] figs.97-103 Yolanda Martínez de Samper spearheaded this project, acting as both promoter and developer while supporting the community's work. Her husband, architect Germán Samper, was in charge of the design. Initial

63 Ibid., 23

64 Guillermo Sanjinés Rojas, 'El programa de acción comunal de La Paz, Bolivia', in *Políticas de desarrollo urbano y regional en América Latina*, ed. Jorge E. Hardoy and Guillermo Geisse (Buenos Aires: Ediciones SIAP, 1972), 321–31.

65 Germán Samper, 'Casas por Ayuda Mutua y Esfuerzo Propio en el barrio "La Fragua" Bogotá', *Revista Proa* 147 (July 1961): 10–22; 'Conjunto de viviendas por autoconstrucción "La Fragua", Bogotá', *Revista Proa* 365 (October 1987): 13; Marcela Samper and María Cecilia O'Byrne, eds., *Casa + casa + casa = ¿ciudad?. Germán Samper. Una investigación en vivienda* (Bogotá: Ediciones Uniandes, 2012), 116-21, 208-19.

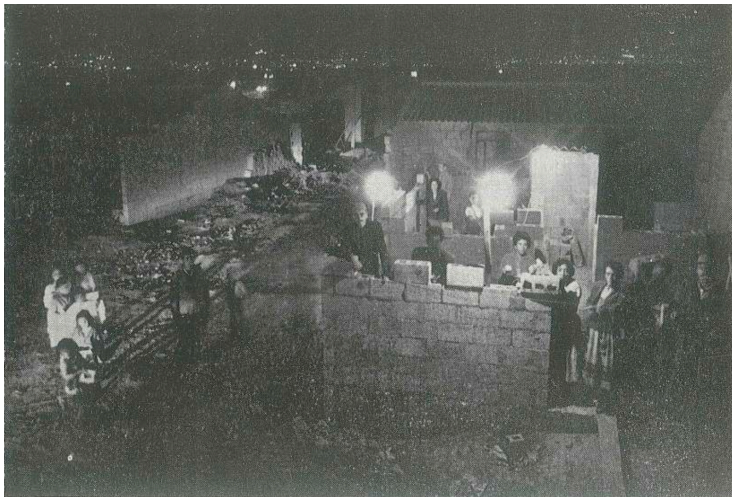
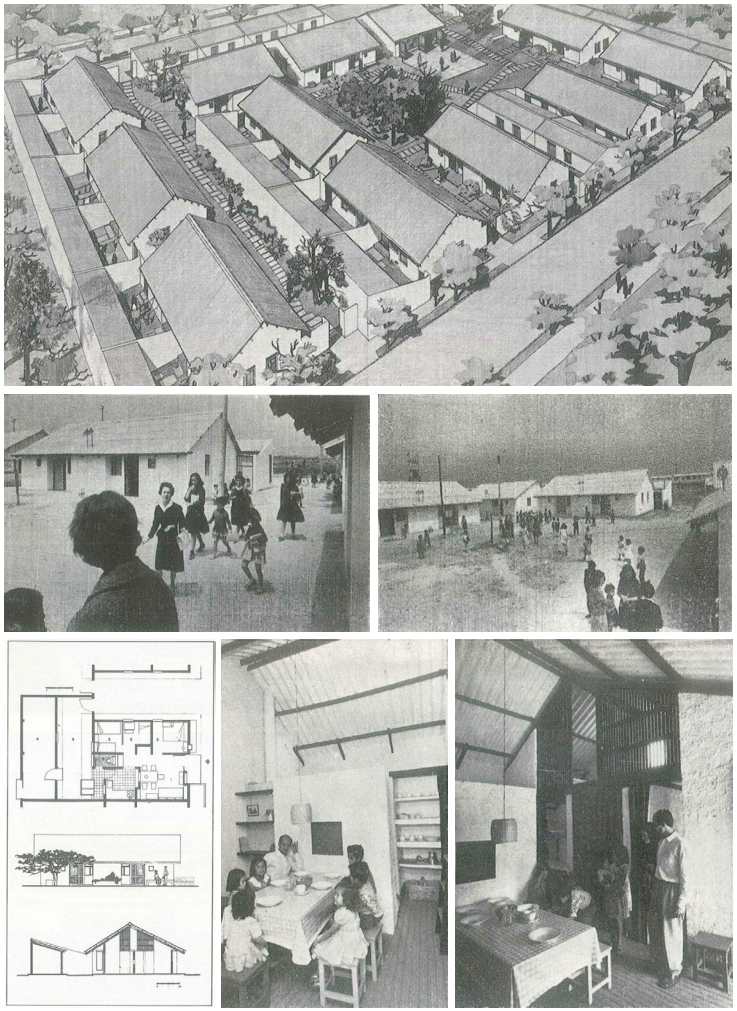


Fig.97 Construction of La Fragua aided self-help housing project during nighttime. Source: *Revista PROA 147*, 15.

guidance was provided informally by their friend René Eyheralde, a jazz enthusiast and a CINVA professor at the time.[66] As the project progressed, other experts from the institution, such as Augusto Enteiche and Rafael Mora Rubio —director of CINVA between 1962 and 1964— joined in. The ICT facilitated the land for the project, which initially encompassed two blocks.

For the urban design, the land was treated as a single macro-block, in which the 94 houses and community facilities would be distributed. The layout included internal squares and pedestrian walkways, intending to exclude cars, reflecting neighbourhood unit strategies that were popular in the region at the time —these strategies are further examined in the second part of this thesis. Each family plot included a temporary room at one end of the site, serving as a support while the permanent house was being con-

66 Samper and O'Byrne, *Casa +*, 209.



Figa.98-103 La Fragua aided self-help housing project in Colombia. Sources: (top drawing, middle and bottom photos) *Revista PROA 147*, 20,21,22; (sections and plan view) *Revista PROA 365*, 13

structed at the other end. This room often transformed into workshops, shops, or even elementary school classrooms.[67]

As Samper attests, the design of the houses involved consultation with future owners and was subject to discussion at round tables. A pilot house was built, leading to several adjustments in the design. The final houses were constructed by the families themselves, utilising simple building strategies with load-bearing cement block walls and Eternit roofing over wooden supports. The high and steeply pitched roof facilitated rapid interior expansion by constructing lofts.[68] The project reached completion around 1962.

Prior to La Fragua, in 1955, Eyheralde oversaw a student project by Alan Smith that explored a self-help and mutual aid housing programme in Panama.[69] This project primarily focused on organising community engagement and provided a general overview of less-studied cases in Suriname, Barbados, Jamaica, and Antigua. A more detailed endeavour was the Urbanization Boyacá project, published in 1958 as a pilot project for the construction of aided self-help housing.[70] This project, which was developed concurrently with La Fragua, was led by architect Alec Bright in collaboration with social worker Helga Peralta.

Located in Cali, Urbanization Boyacá was named by its founders after a battle in Colombia's war of independence, symbolising the community's quest for 'economic independence' through homeownership.[71] figs.104-8 The initiative originated from a community of families living in precarious, illegal settlements, devoid of basic utilities, who organised themselves to improve their neighbourhood's conditions. They established a non-profit society of 300 members, securing the support of the Mayor's office and CINVA.

67 Samper, 'Casas por Ayuda Mutua'; Samper and O'Byrne, *Casa +*, 116-21.
68 Samper, 'Casas por Ayuda Mutua'.
69 Alan Smith, 'Bases para un programa de Ayuda Propia y Ayuda Mutua en vivienda para la República de Panamá' (Final course paper, Bogotá, CINVA, 1955), Box 33, CINVA.
70 CINVA, 'Urbanización Boyacá. Proyecto piloto de construcción de viviendas por ayuda mutua', Final report (Bogotá: CINVA, 1958), Box 208, CINVA.
71 Ibid., 12.

Figs.104-8 Construction process of Urbanización Boyacá, Colombia. Source: CINVA, 'Urbanización Boyacá'.

The implementation commenced with extensive conversations with the community, detailed surveys of the families' socio-economic conditions, and assessing the natural and built environment's status. These interactions established alliances among the authorities, community, and CINVA to facilitate the project. The stages involved included land regularisation, where each family would initially cover half the cost of their plot.[72] The housing design emerged from a participatory process, considering both existing conditions and future requirements of the families. Further, due to climatic considerations, the design encompassed two separate volumes to facilitate cross-ventilation. This design choice aligned with the families' pre-existing housing arrangement of rooms built around an interior courtyard.[73] Local materials and

72 Ibid., 41.
73 Ibid., 20-8.

simple techniques, including the CINVA-RAM, were employed in the houses' construction.[74] The chapter on the working methodology adopted refers to the 1953 on aided self-help housing based on the Puerto Rico experience.[75]

Projects such as La Fragua, Boyacá, and particularly Siloé, showed the interconnected aspects of research, teaching, and dissemination that CINVA incorporated between 1951 and 1960. For this part of the thesis, these projects were reviewed from the perspective of community development and aided self-help housing, emphasising the interdisciplinary insights provided by experts from various countries in the Americas.

74 Ibid., 51-2.
75 Ibid., 54-5.

In 1959, César Garcés assumed the role of interim director, albeit for a brief period, as he resigned in October of the same year.[76] Correspondence between Garcés, Solow, and Currie hinted at challenging times at CINVA and the PAU housing division, as well as disagreements with their successors.[77] In 1959, Walter Harris wrote a critical report which also informed the future direction of the CINVA programme.[78] Harris held the directorship briefly in 1960 before handing over in 1962 to Rafael Mora Rubio. The last professors associated with Currie departed from CINVA in 1961. During Rubio's tenure, he focused mainly on the construction of Ciudad Techo and the processes of aided self-help housing, involving professors such as Rubén Donath and briefly, Guillermo Loveluck.[79] John Turner also contributed to a course in 1967.[80] Loveluck was part of the 'aided self-help housing' courses in the early 1960s, coinciding with the major expansion of this strategy in Chile, driven by US economic support in 1957, while working in CORVI's Office of Housing Self-Help.

*

This inter-American trajectory of housing ideas, supported by US institutions and experts, had an impact on public policies in countries like Chile and the establishment of research and training centres such as CINVA in Colombia. The next chapter focuses on the dissemination of these ideas in Bolivia, particularly in La Paz. It delves into Bolivia's relationship with the US during a period marked by reforms that, among various outcomes, precipitated a crisis in urban housing. This era witnessed the institutional and legislative development of housing solutions, supported by international consultants. The chapter also examines how some architects, involved in Bolivia's central and local governments, received training at CINVA during this period, highlighting the cross-border influences on Bolivian urban development.

76 César Garcés, 'Letter Leonard J. Currie', 16 December 1959, Folder Letters in Spanish, Box 10, VTECH.
77 Anatole Solow, 'Letter to Leonard J. Currie', 17 June 1959, Folder Series II: Personal papers, Box 10, VTECH.
78 Walter D. Harris, 'Program Analysis and Recommendations for CINVA', Mission report (Washington DC: PAU, 7 September 1959), VTECH.
79 Guillermo Loveluck, 'Curso de Adiestramiento en Autoconstrucción' (CINVA, 1962), Box 18, CINVA.
80 John F. C. Turner, 'II Curso Superior de Vivienda. La Autoconstrucción' (CINVA, 1967), Box 95, CINVA.

5

The Roof-Loan scheme. Austerity and homeownership to address Bolivia's housing shortage

Until the mid-1950s, Bolivia's urban housing deficit and informal settlement issues were not as severe as those faced by its neighbouring countries, such as Brazil, Peru, and Chile. However, the housing landscape began to change following the Bolivian Revolution of 1952, which set in motion a series of reforms that brought about profound transformations within the country. One outcome of these reforms was an increase in the urbanization of Bolivia's population. This period witnessed far-reaching transitions, including implementing universal suffrage, a contentious decision to nationalize the mining industry, and introducing an extensive agrarian reform —pioneering actions within the regional context. As early as 1954, these transformative measures were accompanied by an urban reform, signalling a period of intensified legislative and institutional building to address the housing needs of low-income people. Despite these efforts, an urban housing crisis emerged by the end of the 1950s.

It is worth noting that although Bolivia was an exceptional case during this period, receiving direct economic support from the US to confront various national challenges, housing was not among the problems targeted by such financial aid. Nonetheless, local endeavours to rectify the housing deficit were complemented by technical assistance from both the US and international organizations, such as the UN, with experts aligned with US interests. Through the UN technical mission of consultant Charles Abrams, this chapter examines how austerity measures were proposed to replace the existing housing programme in Bolivia. Abrams' rec-

ommendations advocated for the expansion of private homeownership through credit accessibility, the incorporation of aided self-help housing as a pragmatic construction strategy, and the encouragement of horizontal urban sprawl through the development of single-family dwellings on available peripheral land, such as the area known as El Alto, located adjacent to La Paz. In articulating these proposals, Abrams engaged in multiple meetings with local stakeholders.

The second half of the twentieth century saw sustained growth in Bolivia's urban population.[1] The country's urban concentration expanded by approximately 4% between 1950 and 1960, attracting roughly 368,000 inhabitants to cities such as La Paz and Santa Cruz, among others.[2] This significant influx resulted in a housing deficit that neither the government nor private companies could mitigate within the necessary timeframe. Gradually, the urban populace increased from 36% in 1960 to over 50% in 1985, ultimately reaching 70% of its population living in cities by 2021 —below the Latin American average of 80%.[3] Internal migration from rural areas to the cities proceeded at a steady pace after 1952, with indigenous communities like the Aymara and Quechua becoming part of the urban dwellers. The rate of these displacements intensified considerably post-1977, encompassing shifts from productive sectors such as mining, with El Alto emerging as a primary focus of urban growth.[4]

Although El Alto did not attain the legal recognition of a city until mid-1980s, it currently stands as Bolivia's second most populous metropolis. Situated next to the valley of La Paz, Abrams recognised the highland of El Alto as early as 1959 as a promising and fertile area for urban expansion. This zone also drew the attention of the US Agency for International Development (USAID), which supported the construction of infrastructure such as highways and improvements to the local international airport in the 1960s. Additionally, the Inter-American Development Bank (IDB) financed housing initiatives such as Ciudad Satélite, a model neighbourhood comprising single-family residences with gardens, designed within the harsh environment of the Bolivian altiplano. Later, the World Bank also advocated for El Alto as a site of urban growth, endorsing aided self-help housing initiatives via a loan agreement implemented in 1978.

This research examines the impacts of foreign aid institutions on the evolving housing landscape of Bolivia across three distinct periods, each characterized by international development agendas. In the 1950s, the first stage began with US technical assistance under the auspices of the Point Four programme, followed by the UN housing consultancy led by Abrams and the dissemination of homeownership and aided self-help housing concepts. The second phase, in the 1960s, was marked by the implementation of development projects funded by the Alliance for Progress, a US aid initiative in Latin America launched after the Cuban Revolution of 1959. These projects notably involved the construction of single-family housing developments, such as Ciudad Satélite in El Alto for working-class and low-income families, and the San Miguel neighbourhood in the valley of La Paz for middle-income residents. This trajectory fostered a socioeconomically dichotomous development pathway. Lastly, in the 1970s and early 1980s, the World Bank aimed to mitigate 'absolute poverty' by expanding aided self-help housing initiatives and integrating slum upgrading as a strategy to promote homeownership in Bolivia. Across these distinct periods, El Alto consistently emerged as the primary recipient of housing projects. This dissertation investigates how these

1 On the urbanisation of La Paz in the first half of the twentieth century: Luis M. Sierra, *La Paz's Colonial Specters: Urbanization, Migration, and Indigenous Political Participation, 1900-1952* (London: Bloomsbury Academic, 2021).
2 Marcia Koth, Albert G. H. Dietz, and Julio A. Silva, *Housing in Latin America* (Cambridge, MA: MIT Press, 1965), 11.
3 World Bank data.
4 Programa de las Naciones Unidas para el Medio Ambiente, *Perspectivas del Medio Ambiente Urbano: GEO El Alto*, Proyecto GEO Ciudades (La Paz: Gobierno Municipal de El Alto, PRODENA, LIDEMA, 2008), 23-6.

externally introduced concepts intersected and interacted with local ideas within each era.

These three moments cross with two political epochs in Bolivian history. The first period, beginning with the Bolivian Revolution of 1952 and concluding with a coup d'état in 1964, was led by the Movimiento Nacionalista Revolucionario [Nationalist Revolutionary Movement MNR]. Over time, this administration earned increasing support from the US government, which was manifested in a substantial augmentation of funding for diverse assistance projects. It was also a period characterized by the involvement of international institutions such as the International Monetary Fund (IMF), which demanded stringent austerity measures. The subsequent period, spanning 1964 to 1982, was marked by military dictatorships and political instability. Bolivian administrations during the 1960s received technical and financial backing support from the Alliance for Progress. Although brief left-wing military governments emerged in the early 1970s, they were quickly overthrown in 1971 by General Hugo Banzer, who presided over a right-wing dictatorship until 1978. Banzer's regime also received US backing during an era marked by Latin American dictatorships supported by the Central Intelligence Agency (CIA), epitomized by Operation Condor, which included dictators from Chile, Brazil, and Argentina, among others. During Banzer's term, the number of agreements between the World Bank and Bolivia increased significantly, including housing programmes primarily situated in El Alto and the slopes of La Paz.

This first part focuses on the urban outcomes of the Bolivian Revolution of 1952 and the subsequent reforms implemented by the MNR. It explores the provision of foreign housing assistance during a period influenced by development discourses initiated by Truman's Point Four programme. This part concludes with an examination of the technical support offered by the UN in 1959. Within this context, the study delves into the intersection and interweaving of housing concepts advocated by foreign experts like Charles Abrams with the perspectives held by local architects and institutions. It considers issues such as the incorporation of aided self-help ideas recently promoted by organizations like CINVA. This fifth chapter illustrates the encounter between North-South and South-South trajectories, highlighting the nuances in the latter, which can be viewed as an inter-American exchange of architectural experiences.

The Bolivian Revolution of 1952. Reformism and the US relations in the early Cold War era

In Bolivia's May 1951 presidential elections, the MNR achieved an unexpected victory. At the time, the party was portrayed as a movement ranging from 'Nazism to Communism' as it encompassed a spectrum of political ideologies, from the centre-right to the centre-left —as well as receiving the support of the Bolivian Communist Party during the elections.[5] The MNR, with its progressive reform agenda, garnered significant backing in urban areas, particularly in La Paz. However, despite their success, the MNR's democratic ascendancy was impeded. Before Congress could ratify its electoral majority, incumbent President Mamerto Urriolagoitia abdicated his responsibilities to a military junta backed by influential economic entities, including leading tin producers and Liberals. Thus, General Hugo Ballivián took control under the pretext of restoring economic stability and protecting Bolivia from the perceived 'Nazi-Communist' threat.[6]

Bolivia was facing an economic crisis marked by inflation, unemployment, and shortages. The military junta tried to demonstrate its ability to govern by solving these problems.[7] One significant

5 James M. Malloy, *Bolivia: The Uncompleted Revolution* (Pittsburgh: University of Pittsburgh Press, 1970), 149-51; Glenn J. Dorn, *The Truman Administration and Bolivia: Making the World Safe for Liberal Constitutional Oligarchy* (University Park: Pennsylvania State University Press, 2011), 25.
6 Malloy, *Bolivia*, 154.
7 Ibid., 155.

event during Ballivián's period was the attempt to negotiate with the US regarding the price of tin, Bolivia's primary economic commodity. The material had bolstered Bolivia's relationship with the US during World War II due to its strategic importance.[8] However, new markets emerged in the post-war period that made Bolivia a less critical supplier, albeit still a necessary one. Ultimately, the negotiations between the junta and Truman's administration resulted in a considerably lower price than expected, diminishing the militaries' credibility.[9] Yet, the junta faced multiple challenges beyond these negotiations.

On April 9, 1952, the Bolivian Revolution commenced with a widespread armed popular uprising against the military regime, primarily concentrated in La Paz, followed by other regions in subsequent days.[10] The MNR spearheaded this uprising, supported by various social factions, including the police and miners.[11] After three days of intense conflict, the uprising succeeded in deposing the military junta on April 12, propelling the MNR to power. Initially, Hernán Siles Zuazo assumed the interim presidency and formed a cabinet representing a range of political ideologies from centre-left to centre-right.[12] On April 17, the MNR leader, Víctor Paz Estenssoro, returned from exile in Argentina, assumed the presidency, and appointed Siles Zuazo as vice-president. Thus, this stage of MNR governance, spanning from 1952 to 1964, was primarily managed by 'pragmatic nationalist centre' leaders,[13] with Estenssoro serving as president from 1952 to 1956, Siles Zuazo from 1956 to 1960, and Estenssoro returning for a second term from 1960 to 1964. Their administration, however, ended abruptly in 1964 when René Barrientos, the government's vice-president, staged a coup at the beginning of Estenssoro's third term.

8 Dorn, *Truman and Bolivia*, 17-26.
9 Malloy, *Bolivia*, 155-6.
10 On the path to the revolution: Laura Gotkowitz, *A Revolution for Our Rights: Indigenous Struggles for Land and Justice in Bolivia, 1880-1952* (Durham: Duke University Press, 2007).
11 Malloy, *Bolivia*, 157-8.
12 Ibid., 167-8.
13 Ibid., 162.

The MNR interpreted the April 1952 revolution as a validation of the May 1951 election results.[14] The party thus pressed forward with the reform agenda outlined in its electoral programme, despite encountering internal challenges within the party and opposition from Bolivian economic elites who felt aggrieved. External challenges also arose, notably with the US government. Nevertheless, with adjustments in the intensity of its measures, the MNR quickly began to implement key reforms.

The first of these reforms was the introduction of universal suffrage, expanding the electoral roll from 150,000 to a million, granting women the right to vote and abolishing the literacy restriction —thus, including indigenous people.[15] Then, the MNR proceeded with the nationalization of the tin mines, a move that met resistance both domestically from local businesspeople and internationally due to its impact on relations with the US. Later, 1953 marked the commencement of a transformative agrarian reform targeting oligarchic rural land ownership. Lastly, in 1954, an urban reform was introduced, which, although less studied than the previous two reforms, was a pioneering measure in Latin America. It addressed the distribution of urban land ownership and was part of a broader legislative effort to address affordable housing and community facility needs.

Despite the MNR's leftist leanings and progressive reform agenda, the US administrations of Truman and, particularly, Eisenhower endorsed their governance. Among other factors, the US seemed to prefer the MNR's centrist and nationalist disposition, viewing it as a more preferable alternative to a potentially more radical left-wing rule.[16] Additionally, Estenssoro's first government sought to reduce tensions with the US from the outset, employ-

14 Ibid., 168.
15 James Dunkerley, 'The Bolivian Revolution at 60: Politics and Historiography', *Journal of Latin American Studies* 45, no. 2 (2013), 329.
16 Stephen G. Rabe, *Eisenhower and Latin America: The Foreign Policy of Anticommunism* (Chapel Hill: The University North Carolina Press, 1988), 77-83.

ing strategies such as involving Ambassador Víctor Andrade, who had previously worked for IBEC, an organization formed by the US businessman Nelson Rockefeller, with broad presence in Latin America.[17] In any case, the MNR era was a period of permanent tension between Bolivia and the US in the broader context of the Cold War, with MNR governments in contact with the Eastern bloc, which could have strengthened their chances of obtaining political and economic support from the US.

Initially, Truman's administration had concerns about the MNR coming to power, particularly due to the party's alliances with left-wing entities and its proposal to nationalize the tin industry. This policy, if successful, had the potential to influence other countries in the region, posing a threat to US interests. Additionally, US stakeholders owned twenty per-cent of the shares in one of Bolivia's primary tin producers, Simón Patiño.[18] While the Truman administration ultimately recognized the Estenssoro government, diplomatic relations, including the tin negotiations, were put on hold until the next US government took office.

President Eisenhower's administration decided to support the MNR government throughout his term. Moreover, the US chose to provide direct economic support to Bolivia, unlike the 'trade not aid' policies that Eisenhower supported at the time.[19] As early as October 1952, the Estenssoro administration proceeded with the nationalization of the tin industry. However, this policy was confined to the three largest firms: Aramayo, Hochschild, and Patiño, all of which received negotiated compensation. Other mining companies, including one in which the US company Casa Grace held shares, were left untouched —this company will later support a US–Bolivian housing project in La Paz during the 1960s, a topic that is reviewed on in the second part of this dissertation. Estenssoro and his administration were cautious to reduce tensions with the US and conveyed that the mining expropriation would be an isolated measure.[20]

17 James Dunkerley, *Rebellion in the Veins: Political Struggle in Bolivia, 1952-82* (London: Verso, 1984), 54-5.
18 Dunkerley, *Rebellion in the Veins*, 55.
19 Bevan Sewell, *The US and Latin America: Eisenhower, Kennedy and Economic Diplomacy in the Cold War* (London: Bloomsbury Academic, 2016), 49-52.

The nationalization of the mining industry also affected Bolivia's internal migration patterns. One of the effects on the workforce was a decline in the number of miners, while urban employment increased, prompting migration to cities such as La Paz, thereby exacerbating the housing deficit.[21] These internal migratory shifts were further amplified by the introduction of the agrarian reform.

Initially, the agrarian reform was not a primary commitment of the MNR, as its popular support primarily came from urban areas rather than rural regions. Moreover, it faced opposition from the right-wing faction of the party, who were concerned about the effects of land ownership restructuring. Nevertheless, land reform was launched in August 1953, beginning a long process. It aimed to provide adequate land parcels to peasants with limited or no land, as long as they cultivated it, by expropriating large properties. The reform also sought to restore usurped lands to communal indigenous communities and support their modernization while respecting collectivist traditions. Additionally, it sought to encourage migration from the highlands to the eastern lowlands.[22]

The transformation of land ownership and agricultural practices commenced slowly and was gradually implemented over several years.[23] Nonetheless, its economic and migratory impacts began to manifest in the mid-1950s. Another significant outcome of agrarian reform was employment. The abolition of serfdom prompted movements of indigenous peasants who migrated from rural areas to the country's major cities in search of job opportunities.[24] This trend would have produced the first land occupations in

20 Dorn, *Truman and Bolivia*, 168-180; Dunkerley, *Rebellion in the Veins*, 54-65; Malloy, *Bolivia*, 172-8.
21 Dunkerley, *Rebellion in the Veins*, 62.
22 Ibid., 65-74.
23 Carmen Soliz, *Fields of Revolution: Agrarian Reform and Rural State Formation in Bolivia, 1935-1964*, (Pittsburgh: University of Pittsburgh Press, 2021).
24 Jorge E. Hardoy and Oscar Moreno, 'Tendencias y alternativas de la reforma urbana', *Desarrollo Económi-*

El Alto. Over the following decades, this area would witness an influx of rural population and the arrival of civilian workers, miners, and educators, among others. As a result, its population increased fifteen-fold between 1952 and 1976.[25]

In the mid-1950s, Bolivia still faced persistent economic and social problems, which it hoped to solve with reforms as well as foreign aid. During the Eisenhower period, there was a substantial increase in funding from the US, particularly from 1954 onward. The aim of this aid was to foster political and economic stability through controlling inflation fostering economic development. This strategy not only involved US aid agencies but also, starting in 1956, the intervention of the IMF.[26] Rather than operating with coercive diplomatic measures, the Eisenhower administration gradually recognised that offering financial support and technical assistance would be a more effective approach to guiding the country.[27]

This approach of foreign operation had a precedent in an economic mission that the US dispatched to Bolivia, resulting in the Bohan Plan of 1942. US economist Merwin Bohan devised a development plan with US assistance to diversify Bolivia's economy.[28] The US initially committed $25 million towards this endeavour. The plan encompassed areas such as the development of a national communications infrastructure, with an emphasis on road networks; support for agricultural development and diversification to reduce Bolivia's reliance on food imports; and stimulating the mining sector. These measures were embraced later by the MNR during their tenure in government.[29] From a territorial

co 13, no. 52 (1974), 644-5.

25 Programa de las Naciones Unidas para el Medio Ambiente, *Perspectivas*, 25.

26 US Department of State, *Bolivia: Fact Sheet. Aid in Action* (Washington DC: US Government Print Office, 1961); James F. Siekmeier, *The Bolivian Revolution and the United States, 1952 to the Present* (University Park: Pennsylvania State University Press, 2011), 38-72; Rabe, *Eisenhower and Latin America*, 77-83.

27 Sewell, *The US and Latin America*, 50.

28 Siekmeier, *Bolivian Revolution*, 21-4; Kenneth D. Lehman, *Bolivia and the United States: A Limited Partnership* (Athens: University of Georgia Press, 1999), 78, 85-6, 183-4.

29 Lehman, *Bolivia and the US*, 183; Alvaro Cuadros, 'Ochenta años del Plan Bohan: Más que una propuesta de desarrollo económico' (Unpublished manuscript, 15 August 2022).

perspective, the Bohan Plan had implications for the construction of highways linking Cochabamba with Santa Cruz, the redistribution of agricultural land, such as in the altiplano, and population redistribution to settle unoccupied regions, as in Santa Cruz. The MNR undertook several of these initiatives post-1952 through a series of reforms. A notable demographic outcome of this plan was the migration of populations from rural highlands to urban centres such as La Paz, Cochabamba, and Santa Cruz.[30]

Two decades after the Bohan Plan, US assistance extended culminating in $220 million in economic aid to Bolivia by 1961.[31] This sum was allocated for technical cooperation, donations for agricultural surpluses for aid purposes, and loans and grants earmarked for specific economic development initiatives, among other issues.

In terms of knowledge transfers, these formed part of the technical cooperation agreement signed in La Paz between the US and Bolivia in March 1951, within the framework of Point Four.[32] Likewise, the signing of a technical provision agreement between Bolivia and the UN in October of the same year paved the way for Charles Abrams' housing consultancy to Bolivia in 1959 at the request of President Siles Zuazo.[33] As part of these transnational knowledge transfers, the OAS also provided study scholarships, exemplified by Bolivian architects Walter Murillo Salcedo and Guillermo Sanjinés Rojas, who were granted fellowships in 1957 and 1958 respectively, to study housing issues at CINVA, in Colombia.

Hewson A. Ryan, a US cultural affairs officer in Bolivia, summarised his views on the purposes of the North-South cultural exchange in his testimony to a subcommittee on government operations at the US House of Representatives. In the context of Cold

30 Cuadros, 'Ochenta años del Plan Bohan'.

31 US Department of State, *Bolivia: Fact Sheet*, 13.

32 United States, *United States Treaties and Other International Agreements*, vol. 2 (Washington DC: United States Government Printing Office, 1952), 679.

33 United Nations, *Treaties and International Agreements Registered or Filed and Recorded with the Secretariat of the United Nations*, vol. 104, Treaty Series (New York: United Nations, 1951), 264.

War tensions, Ryan stated that this interaction aimed to curtail 'the longstanding and deep infiltration of the Marxist thought pattern in intellectual and labour circles in Bolivia.' He further identified the primary challenge as dismantling 'some 25 years of Marxist domination of the universities,' noting a 'pervasive influence' in normal schools —teacher training institutions— and labour circles.[34] 'Many of the people we have invited have been Marxists and have had Marxist backgrounds, but we have been able to get some to the States and show them a true picture' claimed Ryan in 1955.[35]

The projects initiated within the framework of Point Four by agencies such as the FOA and later the ICA, had institutional, territorial, and urban impacts. The agricultural and forestry sectors grew, leading to increased sugar and rice production to meet domestic demand, as well as timber surpluses for export. Additionally, the construction of highways connecting Santa Cruz, a key economic hub, with the country's eastern region, and the establishment of multiple roads and bridges enabled year-round communication, overcoming the previous need for road closures during the rainy season. Sixteen health centres were built, and over fifty urban schools received repairs and improvements to their community facilities.[36]

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Against the backdrop of social demands and responses throughout the reformist period of the Bolivian Revolution, and with the geopolitical interest of the US and international technical assistance to the country, an institutional framework began to emerge to address urban land ownership and housing issues. Although Bolivia had been addressing housing problems through legislation as early as 1924, with housing issues becoming part of the constitution in 1938, it was in the mid-1950s that efforts were

34 US House of Representatives, *United States Technical Assistance and Related Activities in Latin America: Hearings before a Subcommittee of the Committee on Government Operations, House of Representatives, Eighty-Fourth Congress, First Session* (Washington DC: US Government Printing Office, 1956), 386.
35 US House of Representatives, *US Technical Assistance*, 386.
36 US Department of State, *Bolivia: Fact Sheet*, 7.

significantly intensified. This period saw the implementation of an urban reform and the establishment of new institutions, including some South-South academic collaborations, dedicated specifically to proposing solutions for the housing deficit among low and middle-income groups.

Building the housing framework during Bolivia's reform period

In the initial half of the twentieth century, Bolivia witnessed the inception of legislative initiatives and institutional essays concerning housing issues, culminating in their incorporation into the national constitution. Legislatively, the groundwork for a future housing policy was laid with the enactment of the 1924 Compulsory Savings Law during Bautista Saavedra's presidency (1921-25).[37] This law aimed to accumulate capital through workers to centrally address key social issues, including access to housing. Later, in 1928, legislation was passed allowing the executive branch to transfer state-owned land in La Paz to build a workers' neighbourhood.[38] The scope of this law was broadened in its second article, extending this provision to include fiscal properties in Oruro and Potosí, thereby enabling the government to manage land for the housing benefit of working-class individuals.

In terms of organisational initiatives, a 1935 supreme decree during José Luis Tejada's administration (1934-36) established the Comité pro-Barrio Obrero [Committee for the Workers' Neighbourhood] in La Paz.[39] This autonomous entity was tasked with acquiring land, reviewing construction plans, and constructing workers' houses, amongst other duties, in line with the state's obligation to ensure the welfare of the working classes. It was deemed necessary to

37 Law of 25 January 1924; Walter Murillo Salcedo, *Aspectos de vivienda y marginalidad* (La Paz, 1975), 20, Aspectos de Vivienda y Marginalidad - La Paz - 1975 - 169.411 A, Folder ID 1095851, ISAD(G) Reference Code WB IBRD/IDA LAC, World Bank Group Archives, Washington DC, US (hereafter designated WB)
38 Law of 19 April 1928.
39 Supreme Decree of 13 August 1935.

devise mechanisms to enhance workers' housing conditions and provide optimal comfort. The Caja de Seguro y Ahorro Obrero [Workers' Insurance and Savings Fund] had been instituted in the months leading up to this.[40] Amongst its diverse functions, it was permitted to invest a portion of its funds in mortgage bonds and the purchase and construction of urban properties. Funds administered by this entity included those from the 1924 Compulsory Savings Law.

Housing was incorporated into the constitution in 1938 during Germán Busch Becerra's administration (1937-39).[41] It outlined the state's responsibility to safeguard the health and life of workers, employees, and peasants, by ensuring access to healthy housing and promoting affordable housing, a mandate that was reaffirmed in the 1945 and 1947 constitutions.

However, an examination of Bolivian housing legislation and institutions conducted by Walter Murillo Salcedo —an official of INVI and CONAVI, which were Bolivian housing institutions active from the 1950s to the 1970s— suggested that while a variety of entities and approaches to housing were implemented, particularly between 1935 and 1949, their overall impact remained limited.[42] Notably, the Caja de Seguro y Ahorro Obrero would have contributed to the construction of 1,384 dwellings, achieved through mortgage loans and direct financial assistance from 1948 to 1955.[43] Despite these initial efforts spanning multiple decades, the housing crisis continued to escalate by 1952. The private sector suffered from meagre production and high costs, while existing housing exhibited unsanitary conditions. La Paz was particularly afflicted, with 54% of the city's housing demanding extensive reconstruction.[44]

40 Supreme Decree of 22 May 1935.
41 Constitution of Bolivia 30 October 1938.
42 Murillo Salcedo, *Aspectos*, 18-29.
43 Ibid., 22.
44 División de Vivienda y Planeamiento, 'La vivienda de interés social en América Latina: Bolivia', Documento de referencia no.2 (Primera reunión técnica Interamericana en Vivienda y Planeamiento, Bogotá: Unión Panamericana, 1956), 12-9.

The inaugural period of trials and approaches to housing was eventually solidified during the MNR administration post the 1952 revolution. Murillo Salcedo notes that this period saw the establishment of the Housing Regime, conceived under the doctrine of Social Security.[45] This entailed the formation of a new national housing institution to coordinate housing affairs and a mechanism for financing housing construction for the lowest-income population. This also incorporated the urban reform for the expropriation of private land. However, due to a myriad of reasons, these three components fell short in resolving the housing deficit. This resulted in a housing crisis towards the late 1950s and triggered legislative and institutional modifications from the 1960s onwards. It also accentuated the concern for housing in the MNR constitution of 1961.

Bolivia's pioneering urban reform, initiated in 1954, set a precedent in the region. It was followed by Cuba's urban reform at the end of 1959 and subsequent reform approaches in the 1960s, with varying intensities and scopes implemented in Brazil, Chile, Colombia, and Venezuela.[46] Throughout the 1960s and 1970s, the Argentine architect Jorge Enrique Hardoy was a prominent figure in discussing the potential impact of urban reforms in Latin America. As historian Alejandra Monti indicates, Hardoy's extensive research and publications —conducted through institutions such as the Centro de Estudios Urbanos y Regionales in Argentina or the UN Centre for Housing, Building, and Planning— examined the role of the state in controlling urban land speculation, while considering the distinct local contexts of Latin American countries through economic, political, and social variables.[47]

45 Murillo Salcedo, *Aspectos*, 15.
46 Jorge E. Hardoy and Oscar Moreno, 'Primeros pasos de la reforma urbana en america latina', *Revista EURE - Revista de Estudios Urbano Regionales* 2, no. 4 (1972): 83–100; Horacio Torrent, 'Reforma urbana y proyecto urbano: dialécticas y tensiones en Chile. 1960-70' (III Congreso de la Asociación Iberoamericana de Historia Urbana, Madrid, 2022); Liliana Viveiros, 'Reforma urbana no Brasil e na Bolívia: discursos, prácticas e temporalidades' (III Congreso de la Asociación Iberoamericana de Historia Urbana, Madrid, 2022).
47 Alejandra Monti, 'Jorge Enrique Hardoy: Promotor Académico, 1950 - 1976' (Ph.D. Dissertation, Rosario, Universidad Nacional de Rosario, 2016).130-40.

In the study on Cuban urban reform, carried out together with Oscar Moreno, they highlight it as prototypical, although Hardoy's approaches were mainly reformist rather than revolutionary.[48] Their research underscored that mere legislative implementation did not alleviate the crisis of housing and urban services, but it significantly altered the traditional power structure, which had dictated the physical and socio-economic features of cities. This modification allowed for the transformation of the structures found in urban societies, characterized by socio-economic disparities, and created the conditions for an integrated spatial structure. Additionally, the reform facilitated the modernization of the construction industry.[49]

Conversely, Hardoy and Moreno offered critical observations about Bolivia's urban reform scope. Their assessment, published in 1972, noted that it primarily impacted the cities of La Paz and Cochabamba, whose urban boundaries were relatively small when the regulation was enforced.[50] Consequently, speculation continued outside these urban areas. The 1959 Abrams UN report was also critical of the extent of urban reform to that date, noting, among other issues, that many landowners had stopped expropriations through legal recourse.[51] Hardoy and Moreno's conclusions were based on a field visit in 1967 and were also influenced by the analyses of Bolivian architect Carlos Calvimontes, whose critiques were featured in a publication by the Inter-American Planning Society (SIAP), edited by Hardoy.[52]

Calvimontes contended that the precarious implementation of the Bolivian urban reform was partly due to the lack of accompanying housing plans and the failure to provide the acquired land with necessary infrastructure and community facilities.[53]

48 Ibid., 140.
49 Hardoy and Moreno, 'Primeros pasos', 93.
50 Ibid., 94.
51 Charles Abrams, 'Informe sobre el financiamiento de la vivienda en Bolivia', Programa de Asistencia Técnica de las Naciones Unidas (New York: Naciones Unidas. Comisión de Asistencia Técnica. Departamento de Asuntos Económicos y Sociales, 7 March 1960), 26-8, Box 30, CU2.
52 Calvimontes Rojas, 'La reforma de la propiedad del suelo urbano', 290-5.
53 Ibid., 294.

Also, he stated that only 95 hectares were expropriated in La Paz, benefiting between 15,000 and 20,000 people, which accounted for approximately 4 to 6 per-cent of the city's population at that time.[54] Contrastingly, data from approximately 1972, presented by the Bolivian scholar Álvaro Cuadros in his book on La Paz's urban history, surpass these figures.[55]As a counterpoint to the criticisms, Cuadros, while acknowledging the limitations of the urban reform, shared some of Hardoy's overarching insights. Cuadros recognized that the Bolivian urban reform achieved a democratization of access to urban land for the rural and marginalized populations, resulting in a social restructuring of land use.[56] According to the scholar, despite the challenges faced, the reform succeeded in breaking the oligarchic control over urban land and challenging the criteria that had historically defined the city as a domain reserved for certain social groups while excluding the majority of the population.[57]

Bolivia's urban reform was implemented through a supreme decree in August 1954, accompanied by supplementary provisions introduced in September of the same year, and subsequently elevated to the status of law in October 1956.[58] The reform targeted all unbuilt properties within the urban radius of departmental capitals that exceeded 10,000 square metres. Such properties were declared of public necessity and utility and were thus subject to expropriation by the respective municipalities. After conducting planning and urban development studies, the municipalities could sell these properties to workers and middle-class individuals who did not own urban real estate, facilitating the construction of their homes. Certain sectors were exempt from this regulation, including dairies, clinics, and sports fields. The last category was relevant because large tracks of land remained available over time and be-

54 Ibid., 293.
55 Cuadros, *La Paz*, 148.
56 About 700 hectares as of 1972 in Cuadros, *La Paz*, 162.
57 Ibid., 164.
58 Supreme Decree No. 3819, 27 August 1954; Supreme Decree No. 3826 of 2 September 1954; Law of 29 October 1956.

came housing projects, such as the San Miguel project on a former racecourse, and Los Pinos on a golf club, both in La Paz, which are discussed in the second part of this dissertation. The purchase value for expropriation was determined based on 1954 appraisals. Calvimontes highlighted that the compensation received by the landowners was quite low,[59] likely due to the fact that landowners did not update the value of the land for tax purposes.[60]

The MNR urban reform aimed to curb land value speculation, which was concentrated in the hands of a few individuals, while also addressing housing challenges and expanding access to urban rights for low-income people. These plots of land included areas that Abrams would later identify in El Alto as suitable for urban expansion. However, many of these sites were beyond the urban radius at the time of the reform. Nevertheless, several housing projects emerged there in the mid-to-late twentieth century, such as Ciudad Satélite in the mid-1960s, financed by the IDB, and Río Seco at the end of the 1970s, funded by the World Bank. These projects, alongside others led by local housing institutions —like Villa Adela— established neighbourhoods through the subdivision of large plots of land, which would later be recognized as models for new urbanisations in El Alto following its urban explosion.[61]

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The urban reform was accompanied by the establishment of the Instituto Nacional de Vivienda [National Housing Institute INVI] in April 1956.[62] INVI, an autonomous and tax-exempt institution, assumed responsibility for housing study, planning, and construction, operating through four-year plans. It derived its economic resources from the National Fund for the Construction of Affordable People's Housing, initially formed in April 1953. This fund was financed by a contribution from employers in the mining

59 Calvimontes Rojas, 'La reforma de la propiedad del suelo urbano', 293.
60 Cuadros, *La Paz*, 148.
61 Rafael Indaburu, 'Evaluación de la ciudad de El Alto', Rapid assessment (La Paz: USAID, 2004), 16.
62 Supreme Decree 4385, 30 April 1956.

and oil sectors, equivalent to 14% of total wages and salaries paid to workers in these industries.[63] Later, this contribution was extended to other sectors,[64] although it was drastically reduced to 2% following the austerity measures of 1956.

The decree mandated that beneficiaries of the housing initiative would cover 50% of the total value of the houses through a 20-year monthly amortisation system. INVI would fund the remaining half —gradually leading to its decapitalization.[65] Among its numerous responsibilities, between 1956 and 1964, INVI was tasked with the development of regulatory plans, the promotion of mutual aid and self-help programmes, the stimulation of the local construction industry, the provision of loans in cash or materials for housing construction, expansion or reconstruction, and the establishment of a savings and loan system for acquiring social housing, among others.[66]

Beyond the central measures aforementioned, architects such as Walter Murillo Salcedo and Guillermo Sanjinés Rojas began to introduce emerging experiences in construction, aided self-help housing and community participation to Bolivia, following their studies in 1957 and 1958 at CINVA. Over the subsequent years, other Bolivian architects who were employed within Bolivia's central or local governments, such as Alfonso Frías Terán, Jorge Prudencio, and Juan Carlos Barrientos, also pursued studies at CINVA.[67] Additionally, architects Carlos Calvimontes and Ranulfo Balderrama enrolled in the Inter-American Urban and Regional Planning Programme (PIAPUR), which was being conducted in Peru in partnership with Yale University. After their studies, Calvimontes worked within the Bolivian Ministry of Housing, while Balderrama

63 Supreme Decree 3359, 9 April 1953.
64 Supreme Decree 5206, 29 April 1959.
65 National Savings and Loan League, 'Bolivia Shelter Sector Assessment' (Washington, DC: USAID, December 1976), 32, Agency for International Development - Office of Housing - Bolivia Shelter Sector Assessment - December 1976 - 169.399 A, Folder ID 1093581, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.
66 Enrique Arce, 'El financiamiento de viviendas por el Instituto Nacional de Vivienda en Bolivia', Preliminary documents (Seminario sobre el financiamiento de la vivienda y servicios públicos en América Latina, Bogotá: CINVA, 1959), 40-1.
67 Although Barrientos was in CONAVI for a short time.

contributed to developing urban plans for El Alto and later worked for CONAVI on housing projects funded by the World Bank.

CINVA, through Chilean architect René Eyheralde, provided consultancy services in 1956 to the Universidad Mayor de San Andrés —where Murillo, Sanjinés, Frías Terán, Calvimontes, and Balderrama became lecturers. This collaboration aimed to fortify the Instituto Experimental de la Vivienda [Experimental Housing Institute], initiated in 1954 with support from the UN and the OAS.[68] Eventually, it ensured some collaboration agreements with the Bolivian government. CINVA's advice encompassed various aspects, ranging from general housing courses to specific construction issues such as the use of adobe, as well as assistance in the administrative and financial management of the research institute.[69]

Upon their return to Bolivia, Murillo Salcedo worked at INVI, while Sanjinés Rojas worked for the municipal government in La Paz. Murillo's research at CINVA spanned Bolivian legislation, housing design, and construction matters, aiming to reduce housing construction costs. Also, his reports regarding proposals for Bolivian housing delved into topics like aided self-help to provide affordable housing. Meanwhile, Sanjinés Rojas played a crucial role in introducing ideas of aided self-help for housing and the broader built environment. He promoted Acción Comunal, a community-driven approach which was implemented in La Paz during the 1960s with funds from the Alliance for Progress. On 3 August 1964, the General Directorate of Acción Comunal was created in the municipality of La Paz to orient and organise community participation in the tasks of improving neighbourhoods, preferably in peripheral areas, and also promoting the aided self-help housing.[70] Later, these ideas were further developed by the World Bank in the late 1970s through slum upgrading strategies, as will be explored in the third part of this thesis. This proactive approach towards collective organization, coupled with the high construction capacities of Bolivians, was noted and emphasized in Charles Abrams' report —who met both Murillo Salcedo and Sanjinés Rojas— discussed in the next section.

68 Raúl Loaiza, 'La vivienda en Bolivia y el Centro de Investigaciones y Asesoramiento en Vivienda' (CINVA, 1956), annex I 78, Box 183, CINVA.
69 Eyrhalde's report in Loaiza, 'La Vivienda en Bolivia', annex 64-89.
70 Sanjinés Rojas, 'El programa de acción comunal', 322.

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Despite concerted efforts at the central level and knowledge transfer experiences with institutions like CINVA, the housing deficit remained on an upward trajectory by the close of the 1950s. According to Murillo Salcedo's 1957 studies, an accurate estimation of the housing problem in 1950s Bolivia was challenging due to the absence of effective population measurement tools.[71] Official housing reports referenced a study conducted in 1952 by John Bland, a technical advisor to the UN in Bolivia.[72] Drawing on the 1950 population census, Bland underscored the scale of the issue, estimating the need to provide housing solutions for approximately 700,000 Bolivians residing in precarious conditions in the country's primary urban centres. The challenge was amplified considering that Bolivia's total population at the time was 3 million, with one third residing in cities.[73] Consequently, around 70 per-cent of Bolivia's urban population lived in precarious conditions. This crisis was further aggravated towards the end of the 1950s due to migratory movements triggered in part by the reforms implemented throughout the decade.[74] The government's response, however, was impeded, as public spending on housing was drastically curtailed following measures prescribed by the IMF to suppress the country's inflation. Therefore, as early as 1956, the government had to reduce the mentioned initial allocation of 14 per-cent of the employer's quota that INVI would receive for social housing construction to a mere 2 per-cent.[75]

71 Walter Murillo Salcedo, 'La vivienda de interés social en Bolivia y el Instituto Nacional de Vivienda' (CINVA, 1957), 8, Box 183, CINVA.
72 A draft copy of the report was found at: John Bland, 'A Request upon Housing in Bolivia', Preliminary report (La Paz: United Nations, 1952), VTECH.
73 Koth, Dietz, and Silva, *Housing in Latin America*, 11.
74 Cuadros, *La Paz*, 145-165.
75 Arce, 'El financiamiento de viviendas', 1.

Originally, INVI had formulated a four-year plan that called for the construction of 9,555 houses between 1956 and 1959. However, once the reduction in public spending was implemented, these figures were cut back significantly.[76] In 1958, for instance, the projection was for constructing 2,450 units. Nevertheless, the actual outcome was merely 76 low-cost housing units, in addition to the commencement of a multi-storey building comprising 82 flats.[77] Furthermore, the projections for the subsequent years anticipated the construction of no more than one-thousand units annually — with approximately 46% of the construction expected to occur in La Paz.[78] The housing plan envisaged the construction of 50 square metre houses, situated on 150 square metre plots, equipped with a living room, two bedrooms, bathroom, and kitchen. Mutual aid methods could expand these structures to include two additional bedrooms. This strategy was expected to stimulate employment in the construction sector while promoting the use of national materials, such as adobe for the walls. Each house was projected to cost approximately 15 million bolivianos, the local currency.[79]

Charles Abrams in Bolivia.
The Roof-Loan scheme, austerity and homeownership

In response to Bolivia's housing crisis in the late 1950s, President Hernán Siles Zuazo, via Minister of Labour and Social Security Aníbal Aguilar Peñarrieta, sought the intervention of a UN mission to analyse the prevailing conditions. Charles Abrams was appointed and visited Bolivia from August 7 to September 2, 1959,[80] forwarding his preliminary report to the Bolivian President on

76 Instituto Nacional de Vivienda, 'Plan Cuatrienal. 1956-1959' (INV, 1956), Box 71, CU2; Arce, 'El financiamiento de viviendas', 7-8

77 Arce, 'El financiamiento de viviendas', 14.

78 Ibid, 9-14.

79 Ibid.

80 Charles Abrams, 'Report on Housing Financing in Bolivia', Draft (New York: United Nations. Technical Assistance Administration, November 1959), 1.

22 December.[81] Abrams' first recommendation was to abandon the existing Bolivian housing programme.[82] He significantly adjusted expectations regarding house size, unit numbers, costs, and construction processes. His focus addressed the most pressing issue —the needs of the lowest-income population— by proposing the Roof-Loan scheme he had previously implemented in Ghana alongside Koenigsberger and Bodiansky. This approach necessitated access to large tracts of land, an achievable goal given the active urban reform. The envisaged urban expansion would occur through families owning their plot and constructing their own single-family houses. This approach emphasized horizontal expansion in the outskirts of Bolivia's major cities, especially targeting El Alto as a potential growth area for the majority of the population.

Abrams' work has recently gained renewed attention among scholars studying housing and development issues in developing countries during the latter half of the twentieth century.[83] However, his contributions in Bolivia are often mentioned only briefly, sometimes characterizing them as a failure in his international consulting career or highlighting the application of the Roof-Loan scheme without further detail. Those who succeeded the local actors Abrams met in government positions, and interviewed for this thesis, have no recollection of Abrams' visit. The archives and documentation of Abrams' work, including the official Spanish and English versions of his report are explored herein.[84]

Abrams' work on Bolivia primarily drew upon his observations during his visit, his discussions with local stakeholders, and the study of documents produced by John Bland and Robert

81 Charles Abrams, 'Letter to Hernán Siles Zuazo, President of Bolivia', 22 December 1959, Box 30, CU2.

82 Abrams, 'Informe sobre Bolivia', 3.

83 Burak Erdim, 'Policy Regionalism and the Limits of Translation in Land Economics', in *Architecture in Development*, ed. Aggregate (New York: Routledge, 2022), 365–81; Ijlal Muzaffar, 'God's Gamble: Self-Help Architecture and the Housing of Risk', in *Architecture in Development*, ed. Aggregate (New York: Routledge, 2022), 47–62; Mónica Pacheco, 'Rehearsing Experts and "Inperts": Crossing Transnational Housing Narratives in West Africa', *Planning Perspectives* 37, no. 5 (3 September 2022): 921–48.

84 The English version of November 1959 is a draft, so it has some differences with the final Spanish version of March 1960.

Davison —both served as UN consultants and issued reports in 1952 and 1955, respectively. Also, Abrams expressed gratitude for the assistance and information provided by the ICA in La Paz, Cochabamba, and Santa Cruz. John Ryan, a training officer with the USOM, had been stationed in Bolivia since 1957. The US, via the ICA, frequently engaged with UN programmes by providing financial support, offering policy, operational, and technical consultation, organising training programmes in the US, and aiding in the recruitment of US technicians for international assignments.[85]

Abrams extensively analysed the US relationship with international aid, particularly its connection with the UN. He stated: 'We should encourage the employment of as many American experts on UN missions as possible and make it easier for them to go to other countries.'[86] According to Abrams, the UN had abundant urban development recommendations but a conspicuous lack of resources and personnel to implement them. Additionally, he was critical of the US bilateral assistance programmes, which he believed did not prioritize housing and urban problems, focusing mainly only on diagnosis and compiling manuals. In his view, the US could make better use of the UN's capabilities.[87]

Abrams' proposals were in line with US foreign aid policies, in the sense of focusing on maintaining political stability. According to Abrams, cities such as La Paz were nerve centres with 'slums' serving as breeding grounds for revolt.[88] Abrams argued that housing aid in Latin America should not be viewed solely as housing provision but as a crucial lever that could shape the entire process of urban development. If properly addressed, it could bolster public confidence and serve as a catalyst for political stability.[89]

85 United States Housing and Home Finance Agency Office of International, *Catalog of Programs of International Cooperation in Housing and Town and Country Planning* (Washington DC: U. S. Housing and Home Finance Agency, Office of the Administrator, International Housing Service, 1958), 7.
86 Abrams, *Man's Struggle*, 250.
87 Ibid., 247-50.
88 Ibid., 193.
89 Henderson, *Housing and the Democratic Ideal*, 191.

Abrams was well aware of the geopolitical role of housing aid as part of the Cold War. He believed that the key to achieving the desired political stability through urban development laid in the expansion of private property ownership. In his view, widespread ownership of land and shelter —outcomes Abrams believed metropolitan areas could facilitate with the right policies— were the foundational elements of expanding freedoms in the world's emergent societies.[90] In his report to the Bolivian government, Abrams portrayed homeownership as the bedrock of both capitalist and communist societies:

> ...in a country where land and adobe are plentiful the failure to create a more substantial proportion of ownership is almost incomprehensible. Home ownership is an important stabilizing force and a vital factor in advancing the aspirations of poor people and giving them more to live for, more to work for, more to hope for. There may be differences of opinion on the best recipe for progress in a country, but both in capitalist and in communist countries, a very definite trend is in evidence to foster home-ownership as a means of enhancing individual security. It should be one of the main aims of Bolivian policy as well.[91]

In Abrams' perspective, most individuals residing in developing regions had their roots in societies where private property and individual or group ownership constituted the accepted way of life. Consequently, the 'Russian strain of communism' held little appeal for them. Additionally, Abrams maintained that most 'underdeveloped' nations had little choice but to stimulate private capital to boost industrial output.[92]

90 Ibid, 187.
91 Abrams, 'Informe sobre Bolivia'.15. Translated by author.
92 Abrams, *Man's Struggle*, 288

When Abrams visited Bolivia in 1959, he encountered substandard urban housing conditions and a steadily growing housing deficit. His visit took him to the major cities of La Paz, Santa Cruz, and Cochabamba, along with smaller cities, villages, and rural areas. In his correspondence, he described Santa Cruz as a 'frontier city—lacking paved streets, sewers, and any means of transportation other than jeeps, which are the only vehicles that can compete on equal terms with beasts of burden.'[93] fig.109 One of the significant challenges identified in his report was Bolivia's status as one of the poorest countries in South America and the world in terms of per capita income. This economic reality meant that the Bolivian government had limited resources to invest in a housing programme, necessitating an 'intelligent policy of austerity' where a maximum number of houses should be built with minimal funds.[94]

Despite the challenges, Abrams approached the issue with some optimism. He asserted that Bolivia, unlike developed countries, possessed comparative advantages like access to plentiful building materials such as adobe and the availability of land around the primary urban centres of La Paz, Santa Cruz, and Cochabamba.[95] He also acknowledged the competence of Bolivians in constructing their own houses. Thus, at the crossroads of austerity measures and leveraging local traditions, Abrams recommended an immediate abandonment of the existing housing programme in favour of providing loans directly to families, enabling them to purchase land for aided self-help houses. By embracing the concept of self-help, government economic assistance would be minimized, and the solution to the housing problem would be placed in the hands of the new homeowners.

Abrams observed that 65% of urban Bolivians resided in just eight cities, most of which saw no significant growth but maintained a static state. This phenomenon reflected Bolivia's city structure, which did not necessarily respond to the evolution of productive or industrial centres attracting large migratory flows, but was a legacy of Spanish colonisation, with urban centres originally designed for territorial conquest.[96] However, rural-urban migrations between 1940 and 1950 had predominantly concentrated in the main cities, triggering a growth of 15-20% over the decade. While acknowledging that the cities did not yet have large squatter populations —as in neighbouring countries— Abrams stressed the need for proactive strategies to prevent this. If left unaddressed, it would become an increasingly common occurrence.[97] He recognised that the primary issues associated with the housing deficit at the time were high rental costs, overcrowding, and a lack of essential services.

Fig.109 The streets and houses of Santa Cruz, Bolivia, as depicted in Charles Abrams' 1964 publication. Source: Abrams, *Man's Struggle*, 53.

93 Charles Abrams, 'Letter to Family and Friends', 21 August 1959, Box 30, CU2.
94 Abrams, 'Informe sobre Bolivia', 6.
95 Ibid., 10.
96 Ibid., 18. Murillo Salcedo, *Aspectos*, 1. Bolivia's independence was in 1825.
97 Abrams, 'Informe sobre Bolivia', 13.

According to Abrams, overcrowding and unsanitary conditions directly contributed to the spread of diseases such as tuberculosis and pneumonia, leading to increased child mortality. Additionally, he noted that 47.5 per-cent of the residences lacked access to water, and 54.2 per-cent were devoid of sanitation facilities.[98] Therefore, he proposed a housing plan that mandated the inclusion of a kitchen and a bathroom with connections to potable water, electricity, and sewage networks. For his studies, preliminary costs and design templates of the housing units were solicited from the La Paz municipal Office for Planning, Architecture, and Urbanism. While Bolivia's existing housing programme aimed to construct 50-square-metre houses with two bedrooms, the Abrams scheme sought to achieve the same standards by incorporating room extensions. Municipal architects proposed the design of initial houses ranging from 21 to 32 square metres.[99] Despite their small size, the houses would incorporate a bedroom, kitchen, and bathroom connected to utilities, with designs anticipating future extensions to include two bedrooms, thereby fulfilling the 50-square-metre criteria. A similar plan, albeit less comprehensive and detailed, was proposed for construction within the urban radius of Santa Cruz, featuring a simplistic one-room scheme of 20 square metres.[100] fig.110

Abrams also enlisted the assistance of architect Guillermo Sanjinés Rojas, the director of the recently founded Departamento de Vivienda de Interés Social [Social Housing department] in La Paz municipality, to assess the background and preferences of the prospective homeowners.[101] The study revealed that the applicants possessed knowledge of construction trades and expressed a desire to establish businesses in front of their houses. Consequently, Abrams argued that the government could not afford to construct complete houses, and at the same time, families

98 Ibid, 14.
99 Ibid, 45.
100 Mario Bonino, 'Presupuesto de construcción', 17 August 1959, Box 71, CU2.
101 Guillermo Sanjinés Rojas, 'Letter to Charles Abrams', 11 September 1959, Box 30, CU2.

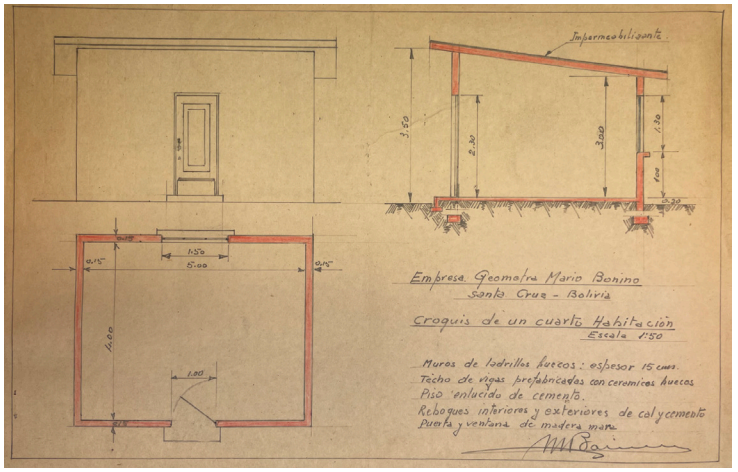


Fig.110 Design of a room for construction cost estimation in Santa Cruz, Bolivia, commissioned by Charles Abrams, 1959 Source: Box 71, CU2.

preferred houses that reflected their individual preferences rather than standardized government-built structures.[102] This aspiration for individualized housing was discussed with Sanjinés Rojas and other municipal workers.[103]

The convergence of self-help approaches towards housing issues is not surprising considering that Sanjinés Rojas, fresh from his studies at CINVA, was beginning to implement the strategy of community development in the municipality of La Paz.[104] The department he headed had been founded on 29 March 1959. Its objective was 'the education and organisation of the community, whose action should continue until after housing had been completed applying the concept of Community Development'.[105] Sanjinés Rojas added that the houses, which could be extended in stages, were to be built by self-help and mutual aid, with plans

102 Abrams, 'Informe sobre Bolivia', 26.
103 Ibid., 27.
104 Sanjinés Rojas, 'El programa de acción comunal', 321.
105 Ibid. Translated by author.

drawn up by his department, which also would provide technical and social assistance.

In the same way, the responsibility for the construction of Abrams' housing programme would fall upon the families. Abrams highlighted Bolivians' building skills and initiative, noting that 'forced by the climate, the inhabitant of the altiplano knows how to build a house to protect himself from the cold at night'.[106] This knowledge, he believed, would be passed down through generations, considering the 'abundance of materials and the simplicity of construction'.[107] Abrams' observations on the generational inheritance of Bolivians' building knowledge remain principally focused on their capacity to utilise local materials. During his journeys between Bolivian cities, he documented the widespread use of adobe and thatched roofs in construction. However, his commentaries did not extend to the adaptations of lifestyle that could be introduced to urban areas by rural inhabitants, such as those from Quechua or Aymara communities. Aspects such as the potential uses of rooms —like the 'living room'— or courtyards are not discussed. The translation of local rural cultures in their adaptation to 'modern' urban environments could have been harnessed and incorporated into the self-help housing process, although this does not appear to have been of primary concern to Abrams —this approach to the housing problem differs from what has been reviewed in the projects carried out by CINVA. This notion is briefly discussed in the third part of this thesis by reviewing the 1970s projects developed by the World Bank in collaboration with local architects.

Supporting the concept that Bolivians possess the capabilities to construct their own homes via an aided self-help approach, the proposed housing programme followed the Roof-Loan scheme previously employed in Ghana, translated into Spanish as 'Techo Propio' [Own Roof] loans. Under this arrangement, families capable of building four walls would receive a loan to cover the costs of the roof, doors, windows, and an additional 15 per-cent of the overall expenses. Abrams emphasized that 'anyone who prefers not to make bricks or build walls is free to hire someone to do it for them.'[108]

106 Abrams, 'Informe sobre Bolivia', 13. Translated by author.
107 Ibid. Translated by author.

During his time in Bolivia, Abrams acknowledged the practicality of employing adobe for construction in regions not significantly afflicted by earthquakes, a stark contrast to neighbouring Chile, where adobe has been substituted due to its structural limitations. As he noted, 'in cities such as La Paz and Cochabamba, mud mixed with straw and water, then moulded into wooden forms and left to dry, makes for effective building bricks in less than a week'.[109] Such a process could substantially cut costs by eliminating the need to import materials, instead favouring less expensive local alternatives, and further reducing labour expenses by encouraging familial involvement and local skill enhancement. Abrams believed that well-built houses designed for expansion and improvement would contribute to the development of 'aesthetically pleasing neighbourhoods' over time. By providing land ownership security and the opportunity for individuals to enhance their own homes, it would motivate progress and ultimately lead to better communities.[110] The overarching objective was to minimise economic investment to the greatest extent possible, as, according to his report, Bolivia was devoid of funds to continue investing in housing. By 1959, the country was reliant on subsidies from the US.[111] In order to avoid further contributions, in addition to using the labour of the population, it was considered necessary to use personal funds or to grant credits.

Based on Abrams' analyses, a family's minimum income would permit the annual repayment of a loan amounting to two million bolivianos, intended for house investment.[112] Between 50 to

108 Ibid., 26. Translated by author.
109 Ibid., 10. Translated by author.
110 Ibid., 6.
111 Ibid.
112 Ibid., 17.

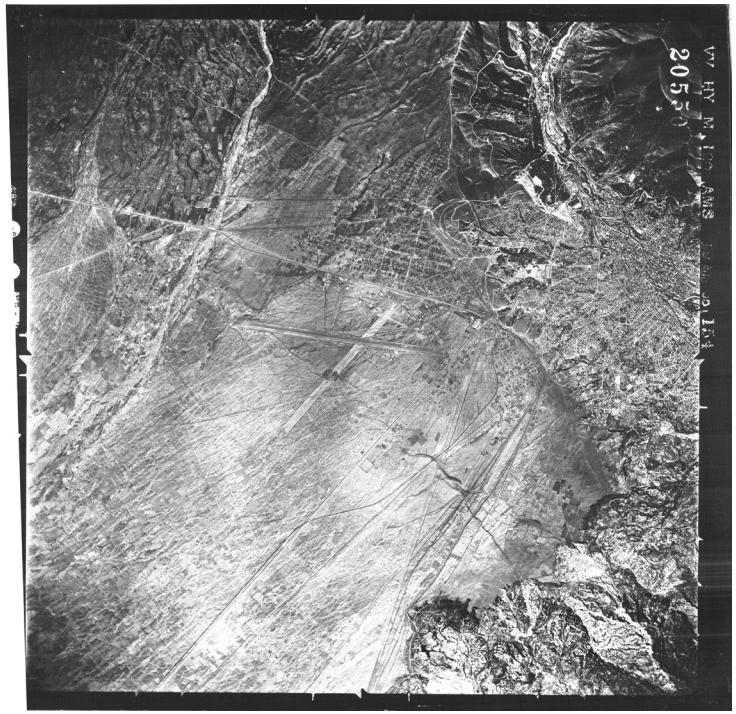


Fig.111 The photograph shows the almost empty plateau of El Alto on the left, identifiable by the location of the airport runways. To the right, within the valley, is the city centre of La Paz. c1955. Source: Servicio Nacional de Aerofotogrametría, Bolivia.

90 days following the contract signing, a family could secure a plot and buy construction materials necessary for constructing doors, windows, and a roof on top of the already built four walls, initiating the loan repayment process, and enabling further home expansion using their own resources. The plots would be sourced from the government's existing land portfolio, while INVI would oversee the loan administration. Abrams estimated that an initial investment of one million dollars would be sufficient, enabling the rapid provision of 3,000 housing solutions as the programme's initial phase.

Abrams acknowledged the plan's precarious nature, stating, 'This programme cannot be considered perfection in housing and urban development. At best, it is only a practical way of resolving a problematic situation.'[113] The objectives of the programme included avoiding inflation by limiting public investment and subsidies to private companies, generating employment opportunities in local material production, and collecting taxes from these houses. Additionally, it aimed to mitigate informal occupations. One crucial factor required for the successful execution of this housing plan was the availability of land. In fact, Abrams addressed this as the first point in his proposal's recommendations: 'Survey of vacant land around La Paz and the subsequent allocation to small landowners for building purposes.'[114]

One of the locations that Abrams identified as ideal for urban expansion in La Paz was the El Alto area.[fig.111] He observed, 'around its airport are thousands of hectares of flat land that is virtually untouched. A four-block walk uphill from the municipality building leads to sparsely inhabited hillsides on which houses could be built that would give their inhabitants the pleasure and economy of walking to work. Short distances in other directions lead to areas with very few houses.'[115] In his report, Abrams acknowledged the potential for urban growth in El Alto with a blend of affordable housing alongside working-class buildings. Although incipient urbanizations such as Villa Dolores already existed, Abrams' vision gained momentum a few years later. In 1963, projects like Ciudad Satélite —a model neighbourhood proposed by INVI and financed by the IDB— started to materialize, as explored in part two of this thesis.

Abrams' programme is a variation of the self-help housing strategy that has been replicated in Latin America since its inception in Puerto Rico in the late 1930s. In his studies he sought to address local concerns. Among the people he consulted were the

113 Ibid., 47. Translated by author.
114 Ibid., 3. Translated by author.
115 Ibid., 12. Translated by author.

aforementioned architects Guillermo Sanjinés Rojas and Walter Murillo Salcedo, who served as the Head of INVI's architecture section and later became the manager of CONAVI —the institution that replaced INVI in the mid-1960s. Two years before this interaction, he received an OAS scholarship to study housing issues at CINVA. Through his government positions, Murillo Salcedo led aided self-help housing projects in Bolivia until the late 1970s, working in collaboration with international institutions such as the IDB and the World Bank.

Despite the Bolivian president and his team of advisors expressing support for Abrams' comprehensive and resource-efficient plan —including his recommendation to restructure INVI by changing its board of directors and reducing the number of employees[116]— the programme was not implemented. As Bernard Taper recounts:

> One of his [Abrams] saddest experiences was in Bolivia in 1959. (...) President, Dr. Hernan Siles Zuazo, said, 'We are deeply impressed, but we fear it will not be possible to carry out your proposal.' 'Why not?' Abrams asked. 'I'm afraid that we don't have a million dollars,' Dr. Siles said. (...) The situation depressed Abrams, who said later, 'Here was a country condemned to wretched housing conditions by its inability to raise a sum that almost any petty real-estate man back in the United States could put his hands on in no time.[117]

Before learning of the President's decision, Abrams had expressed significant optimism regarding the reception of his proposals. In a letter dated August 28, he described the mission as a success to his family and friends, and his ideas received extensive coverage in various Bolivian media outlets.[118] fig.112 However, de-

116 Ibid., 35-8.

117 Otto H. Koenigsberger, Steven Groak, and Beverly Bernstein, eds., *The Work of Charles Abrams: Housing and Urban Renewal in the USA and the Third World* (Oxford: Pergamon Press, 1980), 38.

118 Charles Abrams, 'Letter to Family and Friends', 28 August 1959, Box 30, CU2.


Se proyecta impulsar la construcción de vivienda barata mediante crédito

El Pueblo (Cochabamba), August 18, 1959

Experto de la ONU Visita Cochabamba

Un Millón de Dólares para la Construcción de Viviendas Obreras en Toda la República

El Diario, August 26, 1959

SOBRE EL PROBLEMA NACIONAL DE LA VIVIENDA RECIBIO INFORME EL MINISTERIO DE TRABAJO

Un experto de las Naciones Unidas sugiere la forma de construcción... su financiamiento y trámites.-

Ultima Hora, August 27, 1959

LA SOLUCION DEL PROBLEMA DE LA VIVIENDA

Editorial, Ultima Hora, August 15, 1959

SE FINANCIARA UN MILLON DE DOLARES PARA LA CONSTRUCCION DE VIVIENDAS EN EL PAIS

El programa actual de vivienda debe ser revisado e instituirse uno nuevo -- Informe del experto de Naciones Unidas en vivienda -- La mayor preocupación del Supremo Gobierno es la de contar con el mayor número de viviendas -- Detalles de la reunión celebrada

La Nacion, August 26, 1959

Técnico de la ONU. Recomienda un Programa Nacional para la Construcción de Vivienda

El Diario, August 27, 195

REDOBLARANSE ESFUERZOS PARA ACELERAR EL PLAN DE CONSTRUCCION DE VIVIENDAS

EL PRESIDENTE SILES SUBRAYO QUE UNA DE LAS PREOCUPACIONES PRINCIPALES DEL GOBIERNO ES LA DOTACION DE VIVIENDAS A UN NUMERO CADA VEZ MAYOR DE TRABAJADORES

La Nacion, August 28, 1959 -ENTREVISTA ESPECIAL AL PRIMER MANDATARIO

Fig.112 Press clippings from Bolivia, as featured in Charles Abrams' report, showcase headlines such as 'Plans to Boost Affordable Housing Construction through Credit,' 'The Solution to the Housing Problem,' and 'US$1 Million to be Financed for Housing Construction in the Country.' Source: Abrams, 'Informe sobre Bolivia', appendix D.

spite this interest, Bolivia lacked the financial resources necessary to implement his programme. Further, in a letter dated June 17, 1960, Abrams stated that based on his experience in the country, the ICA also displayed no inclination to contribute funds to housing issues at that particular time. Nonetheless, Abrams projected that this situation might change in the upcoming years —foreseeing the enactment of the Alliance for Progress. He also suggested introducing a group of Bolivian businesspeople to a US businessman who had commenced housing construction in Peru through a US law facilitating the use of dollar credits that might exist in the country via grain operations.[119] These developments will be further discussed in the next part of this dissertation.

* * *

Bolivia's financial status began to improve just a few years later, in 1963, when the government received a loan of $4.5 million specifically for housing from the IDB, as part of the Alliance for Progress initiative. A second IDB loan of $5 million came in 1967. These funds were earmarked for objectives and opportunities akin to those proposed by Charles Abrams, such as the aided self-help approach and urban expansion projects in El Alto. A similar scenario occurred in 1978 when the World Bank also sponsored self-help housing projects in that area. In a way, nascent ideas put forth by Abrams in the late 1950s resonated with the interests of Bolivian planners and architects in the ensuing decades.

119 Charles Abrams, 'Letter to René Flores, President Confederación Nacional de Profesionales', 17 June 1960, Box 30, CU2.

II

Satellite cities and Neighbourhood units to foster middle-classes in the Alliance for Progress

Introduction

> The 'Alianza para el Progreso' is a phrase, but I think its real significance is here in this field. This is a battlefield, and I am glad that the Colombian Government under the leadership of your President and all of the people of this country –joining their efforts with the Inter-American Bank and the United States AID program– are going to see filling this field in the next months and years, home after home for people who desperately need it, schools for people who need to be educated, and a steadily rising standard of living for all of our people.[1]
>
> –US President John F. Kennedy.
> Speech at the Ciudad Techo housing project in Bogotá, Colombia, 17 December 1961.

A 'battlefield' to be filled with 'homes' was how US President John F. Kennedy described the Ciudad Techo site on the day of its inauguration. Standing on the outskirts of Bogotá, Colombia, two years after the Cuban Revolution of 1959, he emphasised that the Cold War was being fought directly on Latin American soil and that housing was part of that confrontation. This sort of 'urban

1 John F. Kennedy, *Public Papers of the Presidents of the United States: John F. Kennedy (1961)*, vol. January 20 to December 31, 1961 (Washington, DC: US Government Printing Office, 1962), 810.

warfare' was funded by the Alliance for Progress, a ten-year programme aimed at supporting the modernization of countries in Latin America through US economic aid. Similar to the period analysed in the previous section, the underlying premise was that development achieved through capitalism and strategies such as homeownership would help counter communist advances.

This part examines how the infusion of capital into international housing aid policies in the 1960s not only targeted low-income families but also aimed to benefit the middle class. It explores the architectures of this development agenda, including the design of 'satellite cities' and model 'neighbourhood units' that sought to integrate the new homeowners. These interventions in the urban environment resulted in both social inclusion and segregation. As President Kennedy highlighted in his remarks, achieving these ambitious projects required an inter-American effort, bringing together national and local governments, international financial institutions, national agencies, and entrepreneurs from the US and Latin America who viewed housing as a means to expand their markets.

One of the iconic images of the Alliance for Progress is the photograph capturing John F. Kennedy's visit to the Ciudad Techo housing project.[fig.1] In the foreground, the Presidents, First Ladies and officials from the US and Colombian governments, unveil a plaque during the project's ground-breaking ceremony, surrounded by a crowd of people, photographers, and cameramen. In the upper central part of the picture, a large billboard displaying the plan of Ciudad Techo takes centre stage, with the geography of Bogotá in the background. The poster provides details about the massive project, covering 304 hectares and accommodating 80,000 inhabitants with 12,000 houses. It was signed by the Instituto de Crédito Territorial (ICT) of Colombia. The darker areas of the urban plan show the homogeneous location of parks and

Fig.1 Inauguration of the Ciudad Techo housing project, Bogotá, Colombia by US President John F. Kennedy and Colombian President Alberto Lleras Camargo, December 1961. In 1965 it changed its name to Ciudad Kennedy. Source: Cecil Stoughton. White House Photographs. John F. Kennedy Presidential Library and Museum, Boston.

community facilities, such as the civic centres and schools referred to in Kennedy's remarks. Ciudad Techo was conceived as a satellite city adjacent to Bogotá, designed not only to provide housing but also to offer essential services that would contribute to the economic development of its residents. While the Ciudad Techo housing project has received attention in recent specialist literature, there is an overlooked element in the image. On the left side, barely showing, is a second billboard welcoming President Kennedy, painted by Hogares Colombianos [Colombian Homes]. It reads: 'US private capital is collaborating with Colombian private capital to build thousands of houses... for... thousands of free labourers. Affiliates of: World Homes Inc. U.S.A.' [figs.2-3]

World Homes was founded in the late 1950s by US entrepreneur Willard Garvey of Wichita, Kansas, who primarily engaged in wheat farming. However, he recognized the potential for expansion and diversification into housing in developing countries

Figs.2-3 World Homes poster welcoming US President John F. Kennedy on his visit to the Ciudad Techo housing project, Bogotá, 1961. Source: Box 94, Jean and Willard Garvey World Homes Collection, MS 94-09, Wichita State University Libraries, Department of Special Collections (hereafter designated WH)

through his Wheat for Homes initiative. Garvey's strategy capitalized on the opportunities presented by the US government's overseas funding, which the Alliance for Progress later reinforced. Ciudad Techo serves as a convergence point for the various themes discussed in this part of the dissertation, which are also connected to the previous section. On the one hand, this satellite city exemplifies strategies targeting Colombia's lowest-income population, aligning with the aided self-help housing programmes promoted by CINVA. On the other hand, companies like Hogares Colombianos, a subsidiary of World Homes, constructed single and two-story housing aimed at the middle socioeconomic class. The design of socially integrated neighbourhoods brought together individuals from diverse income levels and backgrounds, including civil servants and military personnel, within the same community. Recent research by scholars such as Nilce Aravecchia, Amy C. Offner, Jorge Rivera, Victoria Sanchez, and Amanda Waterhouse, among others, has shed light on the processes, challenges, and changes experienced during the Ciudad Techo project.[2] Their work is complemented by archival material from CINVA, World Homes, and US National Archives. Nevertheless, Ciudad Techo is just one of the cases examined to illustrate the impact of development discourses from the 1960s on the built environment.

This second part explores the architectures of development that emerged in Latin America since the implementation of international housing aid policies supported by the Alliance for Progress. It delves into the trajectories followed by the ideas and designs of satellite cities and neighbourhood units across various countries in the region. This section is divided into five chapters, each capturing the inter-American trajectories and contact zones of these housing ideas

2 Nilce Aravecchia-Botas, 'Técnica y política en la producción de la ciudad latinoamericana. Ciudad Kennedy, Bogotá (1960-1963)', *A&P Continuidad* 6, no. 11 (2019): 70–81; Sanchez Holguin, 'Colombia's History'; Amanda Waterhouse, 'Grassroots Architects: Planning, Protest, and U.S. Foreign Aid in Cold War Colombia' (Ph.D. Dissertation, Indiana, Indiana University, 2022); Amy Offner, 'Homeownership and Social Welfare in the Americas: Ciudad Kennedy as a Midcentury Crossroads', in Making Cities Global. The Transnational Turn in Urban History, ed. A. K. Sandoval-Strausz and Nancy H. Kwak (Pennsylvania: University of Pennsylvania Press, 2017); Jorge Rivera Páez, 'El CINVA: un modelo de cooperación técnica 1951 - 1972' (Master in History, Bogotá, Universidad Nacional de Colombia, 2002).

and projects. The first chapter sets the historical context of the Alliance for Progress, discussing the development agenda of modernizing 'traditional' economies during the John F. Kennedy administration (1961-63). It highlights the emphasis on region's development through economic aid programmes, contrasting with the previous decade's approach of avoiding direct financial assistance. The second chapter focuses on two key institutions within the Alliance: the recently established Inter-American Development Bank (IDB) and the US Agency for International Development (USAID). It examines the housing interventions financed and supported by these institutions in Latin America, emphasizing the technical assistance provided to introduce new housing finance instruments, such as the Savings and Loan strategy. These initiatives helped to reshape the built environment and extended housing aid to the middle class.

This part's third and fourth chapters delve into the architectures of satellite cities and neighbourhood units that were adopted through international housing aid during this period. The section traces the development of Clarence Perry's ideas, which were disseminated and implemented by architects such as Anatole Solow or Fernando Belaúnde, and institutions like CINVA, in projects such as Ciudad Hatillo in Costa Rica, Ventanilla in Peru, or Ciudad Techo in Colombia. The trajectory of companies like International Basic Economy Corporation (IBEC) and, particularly, World Homes is also explored, as they proposed or constructed modern model neighbourhoods in countries such as Peru, Colombia, Mexico, and Chile during the Alliance for Progress. The narratives presented by cultural, art, and architectural historians such as Nancy Kwak, Andrea Renner, and Helen Gyger are expanded upon and complemented with new archival material and interviews with local stakeholders.[3]

The fifth chapter takes a broader focus on Bolivia, examining how the discourses and trajectories described in the dissertation had tangible impacts, specifically through Ciudad Satélite, a satellite city designed in El Alto, and the model neighbourhood of San Miguel, a housing project in the southern part of La Paz constructed by Hogares Bolivianos, a subsidiary of World Homes.

3 Andrea Renner, 'Housing Diplomacy: US Housing Aid to Latin America, 1949-1973' (Ph.D. Dissertation, New York, Columbia University, 2011); Nancy Kwak, A World of Homeowners: American Power and the Politics of Housing Aid (Chicago: The University of Chicago Press, 2015); Gyger, 'The Informal as a Project'.

The Alliance for Progress got off to a rocky start in the early 1960s and gradually faded during the US presidency of Lyndon B. Johnson (1963-69) before disappearing under the administration of Richard Nixon (1969-74). It has often been regarded as a failure, or a truncated project, and heavily criticized, particularly by Latin American dependency theorists. Nevertheless, this research delves into the specific impacts of the economic aid programme and its objectives of development and modernization on Latin America's built environment, drawing upon the work of researchers like Leandro Benmergui, who has explored Argentina and Brazil, and Amanda Waterhouse, who has focused on Colombia.[4]

In the case of Bolivia, this thesis traces the transition from 1959, when the proposed $1 million housing programme by Charles Abrams could not be financed, to the 1960s, when the government received $10.5 million for housing projects through the Alliance for Progress, facilitated by the IDB, USAID, and private investments. This thesis explores how these housing projects contributed to what can be described as a 'bipolar' urban growth pattern in La Paz. On the one hand, Ciudad Satélite supported the urban expansion of the working class, low-income, and indigenous population towards El Alto, serving as a model for subsequent urban developments in the area —today, El Alto has surpassed La Paz to become the second-largest city in Bolivia in terms of population. On the other hand, World Homes' San Miguel housing project catalysed the growth of La Paz's affluent classes as they migrated and expanded into the southern valley. Currently, the San Miguel sector boasts some of the highest land prices in Bolivia.

4 Leandro Benmergui, 'Housing development: Housing policy, slums, and squatter settlements in Rio de Janeiro, Brazil and Buenos Aires, Argentina, 1948-1973' (Ph.D. Dissertation, College Park, University of Maryland, 2012); Waterhouse, 'Grassroots Architects'.

Fig.4 US President John F. Kennedy's trip to South America in the context of the Alliance for Progress. Pictured with First Lady Jacqueline Kennedy, Venezuelan President Rómulo Bettancourt, and Teodoro Moscoso, coordinator of the Alliance for Progress, among others, at La Morita Resettlement Project, Venezuela, at a ceremony granting farmers titles to land under the Agrarian Reform Program. December 1961. Source: Cecil Stoughton. White House Photographs. John F. Kennedy Presidential Library and Museum, Boston

1

Alliance for Progress' economic project for Latin America 1961-71

> [...] I have called on all people of the hemisphere to join in a new Alliance for Progress —'Alianza para [el] Progreso'— a vast cooperative effort, unparalleled in magnitude and nobility of purpose, to satisfy the basic needs of the American people for homes, work and land, health and schools —'techo, trabajo y tierra, salud y escuela'.
> —US President John F. Kennedy, 1960.[1]

With these words, a blend of English and Spanish, John F. Kennedy introduced the Alliance for Progress, a programme aimed at providing technical, economic, and educational aid to the 'American' people, encompassing all residents of the Americas, not just US citizens. In his speech, Kennedy highlighted the urgent issue of homes or 'roof' ('techo' in Spanish), displaying an austere understanding of the housing problem. He then emphasized the importance of work and land, hinting at future support for agrarian reforms. Finally, he underscored the significance of health and education, which would later be manifested through medical centres and the establishment of educational programmes in schools, universities, and research centres.

During the 1960s, there was a notable increase in economic support for the development of Latin America. In addition to the technical assistance provided in the 1950s, $20 billion was promised to be invested exclusively in Latin America over ten years through the Alliance for Progress. The main objective was

1 Address by President Kennedy at a White House Reception for Members of Congress and for the Diplomatic Corps of the Latin American Republic. March 13, 1961, in John F. Kennedy, *Public Papers of the Presidents of the United States: John F. Kennedy (1961)*, vol. January 20 to December 31, 1961 (Washington, DC: US Government Printing Office, 1962), 172.

to foster development through social and economic projects that could bring about reforms and achieve the 'modernization' of 'underdeveloped' countries. From the perspective of the US, investing in the region's development was justified by multiple factors, including expanding the US market and countering the spread of communism in the Americas.

By the late 1950s, the US had intervened in several 'third world' countries, including the Korean War and conflicts in the Philippines, Indonesia, Iran, Lebanon, Guatemala, and Panama.[2] However, the Cuban Revolution in 1959 significantly shifted the dynamics of the Cold War toward Latin America. Under the leadership of Fidel Castro, a revolutionary group overthrew President Fulgencio Batista, who had come to power through a coup d'état in 1952. Batista's government was criticized as an ally of US imperialism and seen as a hindrance to local development. After assuming power, the revolution pursued a Marxist agenda. In response, in October 1960, the US imposed an embargo on exports to the island.

The Cuban Revolution brought Cold War frontlines within 150 kilometres of the Florida peninsula in the US, within range of a nuclear missile. Responses from the Kennedy administration ranged from long-term regional diplomacy to short-term military interventions. In April 1961, a failed invasion at the Bay of Pigs occurred. The situation escalated in 1962 with the Cuban Missile Crisis when the Soviet Union deployed nuclear weapons in Cuba. This period witnessed a complex interplay of military activities, espionage, diplomacy, political reforms, and economic aid in Latin America, all aimed at expanding US geopolitical influence by promoting liberal, democratic, and capitalist ideals.

'The Act of Bogotá is a reply to Reds' was the New York Times headline in 1960 to announce the approval of $500 million

2 Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge: Cambridge University Press, 2007), 110-57.

in economic aid for Latin America by the US government —excluding Cuba. The article stressed that it was 'a plan to prevent communism from taking advantage of poverty and backwardness in Latin America'.[3] Previously, in 1958, Brazilian President Juscelino Kubitschek proposed Operation Pan-America to the Eisenhower administration to address Latin America's underdevelopment, initially facing resistance.[4] However, with the active participation of Colombian President Alberto Lleras Camargo and continuous negotiations by Latin American representatives —along with regional trips by Vice-President Richard Nixon and President Eisenhower— direct economic aid was ultimately adopted amidst escalating Cold War tensions.[5]

In September 1960, delegates from Latin American countries, excluding Cuba, signed the Act of Bogotá. Additionally, the Social Progress Trust Fund (SPTF), drawing inspiration from Operation Pan-America, received approval with US funding of US$394 million. This fund was then channelled through the Alliance for Progress, with a substantial portion dedicated to housing initiatives.

In November 1960, John F. Kennedy won the US presidential election. He announced the Alliance for Progress during his inaugural address in January 1961. While Kennedy's remarks on countering communism were more measured than Truman's 1949 speech, the underlying message remained unchanged.[6] Kennedy emphasized the importance of international cooperation and highlighted self-help as a crucial driver during his administration.

3 Juan de Onis, 'The Act of Bogotá Is a Reply to Reds; Plan to Help Latin America Help Itself Fights Poverty and Backwardness', *The New York Times*, 19 September 1960.

4 'Memorandum of a Conversation, Laranjeiras Palace, Rio de Janeiro, August 5, 1958, 11 a.m', FRUS vol. V, American Republics 1958-1960, doc.254.

5 Carlos Caballero Argáez, *Alberto Lleras Camargo y John F. Kennedy: amistad y política internacional. Recuento de episodios de la Guerra Fría, la Alianza para el Progreso y el problema de Cuba* (Bogotá: Universidad de los Andes, 2014), 148-58; Samuel Hale Butterfield, *U.S. Development Aid–an Historic First: Achievements and Failures in the Twentieth Century* (Westport: Praeger Publishers, 2004), 66-7; Stephen G. Rabe, *Eisenhower and Latin America: The Foreign Policy of Anticommunism* (Chapel Hill: The University North Carolina Press, 1988), 100-16.

6 Arthur M. Schlesinger, *A Thousand Days: John F. Kennedy in the White House* (London: Andre Deutsch, 1965), 516.

This approach became vital for the pursued objectives of development and modernization:

> To those people in the huts and villages of half the globe struggling to break the bonds of mass misery, we pledge our best efforts to help them help themselves, for whatever period is required—not because the communists may be doing it, not because we seek their votes, but because it is right.[7]

In March 1961, the White House ratified the Alliance for Progress at a meeting with Latin American diplomats: 'an approach consistent with the majestic concept of Operation Pan-America'.[8] The speech emphasized that countries seeking to benefit from the Alliance should create long-term development plans and commit to social change through various reforms. These points were further discussed, agreed upon, and signed at the Charter of Punta del Este in Uruguay in June 1961. The charter solidified the Alliance for Progress, aiming to bring accelerated economic progress to the people, as stated in the preamble. Representatives from various American countries attended the meeting, including Ernesto Che Guevara as the Cuban envoy — although Cuba ultimately did not sign the agreement.[9]

The Charter of Punta del Este outlined several ambitious objectives, such as achieving substantial and sustained growth of per capita income, accelerating the process of industrialization, and promoting comprehensive agrarian reforms. One specific objective highlighted the importance of housing:

> To increase the construction of low-cost houses for low-income families in order to replace inadequate and deficient housing and to reduce housing shortages; and to provide necessary public services to both urban and rural centres of population.

7 Kennedy, *Public Papers*, 1.
8 Ibid., 172.
9 Jeffrey F. Taffet, *Foreign Aid as Foreign Policy: The Alliance for Progress in Latin America* (New York: Routledge, 2007), 32,35-7.

Housing, along with industrialization, land reforms, and educational programmes, became integral to development agendas driven by the ideas of modernization derived from the social sciences. Scholars such as Walt Whitman Rostow, Arthur Schlesinger, and Lincoln Gordon played significant roles in shaping the Alliance for Progress based on this theory. According to authors Sara Lorenzini and Michael E. Latham, modernization theory should be viewed as an ideology 'through which dangers were perceived, strategies were legitimated, and national identities were projected'.[10]

W. W. Rostow, Max Millikan, Lucian Pye, and a group of academics from Cambridge, played a key role in developing modernization theory. Rostow, an economic history professor at MIT, wrote the influential book *The Stages of Economic Growth: A non-communist manifesto* in 1960. He argued that Latin American countries were in the early stages of growth and required substantial capital investments and technical assistance to transition from 'traditional' societies to advanced industrial states.[11] The aim was to emulate the development path of Western industrialized nations. Arthur Schlesinger, a Harvard professor of social history, proposed promoting the modernization of Latin America through a 'middle-class revolution.' He recognized the emergence of a middle class in urban centres and believed that freeing professionals, such as doctors, lawyers, teachers, small business owners, and office workers, from oligarchic structures, with the necessary economic support, would facilitate industrialization.[12] These ideas gained support from Lincoln Gor-

10 Michael E. Latham, 'Ideology, Social Science, and Destiny: Modernization and the Kennedy-Era Alliance for Progress', *Diplomatic History* 22, no. 2 (Spring 1998), 229. Also: Sara Lorenzini, *Global Development: A Cold War History* (Princeton: Princeton University Press, 2019).
11 David Ekbladh, *The Great American Mission: Modernization and the Construction of an American World Order*, America in the World 6 (Princeton: Princeton University Press, 2011), 185-7.
12 Stephen G. Rabe, *The Most Dangerous Area in the World: John F. Kennedy Confronts Communist*

don, a professor in international economic relations at Harvard who had previously been involved in the implementation of the Marshall Plan. Gordon believed that Latin America had a growing middle class and industrial base that surpassed the conditions in Africa or Asia.[13] This part of the dissertation further shows how housing projects integrated these ideas of accessing the middle classes.

Both Rostow and Schlesinger were involved in drafting the Alliance for Progress, which was discussed at the 1961 Punta del Este conference. Gordon participated as a US delegate at the conference. Later that year, all three left their university positions to assume roles in the Kennedy administration. Rostow became the Director of Policy Planning, Schlesinger was appointed as Special Assistant to the President dedicated to Latin American affairs, and Gordon became the Ambassador to Brazil.

The $20 billion investment promised by the Alliance for Progress resembled the $13 billion allocated in Truman's Marshall Plan for Europe's post-war reconstruction. However, the assistance provided to Latin America primarily comprised loans rather than grants.[14] To secure support from the US Congress, these funds needed to be framed as economic investments rather than expenditures to expand their countries' markets, including overseas housing ventures. Therefore, in 1962, the US Congress mandated that all foreign aid purchases be made from the US, addressing concerns about Latin American countries favouring European or Asian products and services.[15]

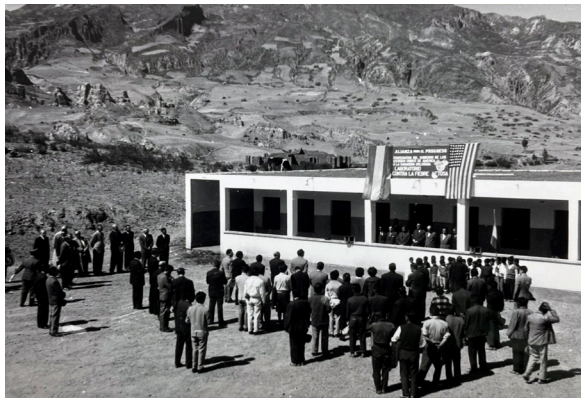
The funds provided by the Alliance for Progress financed a wide range of projects to promote development and modernization in developing economies. In the first year alone, numerous projects were undertaken, such as improving water supply in 58 Brazilian cities, enhancing Ecuadorian herds with US livestock,

Revolution in Latin America (Chapel Hill: The University of North Carolina Press, 1999), 23-5.

13 Latham, *Modernization as Ideology*, 78-80.

14 Rabe, *The Most Dangerous Area*, 154.

15 Taffet, *Foreign Aid*, 42-3. In addition, 50% of the transport will have to be by US ships.



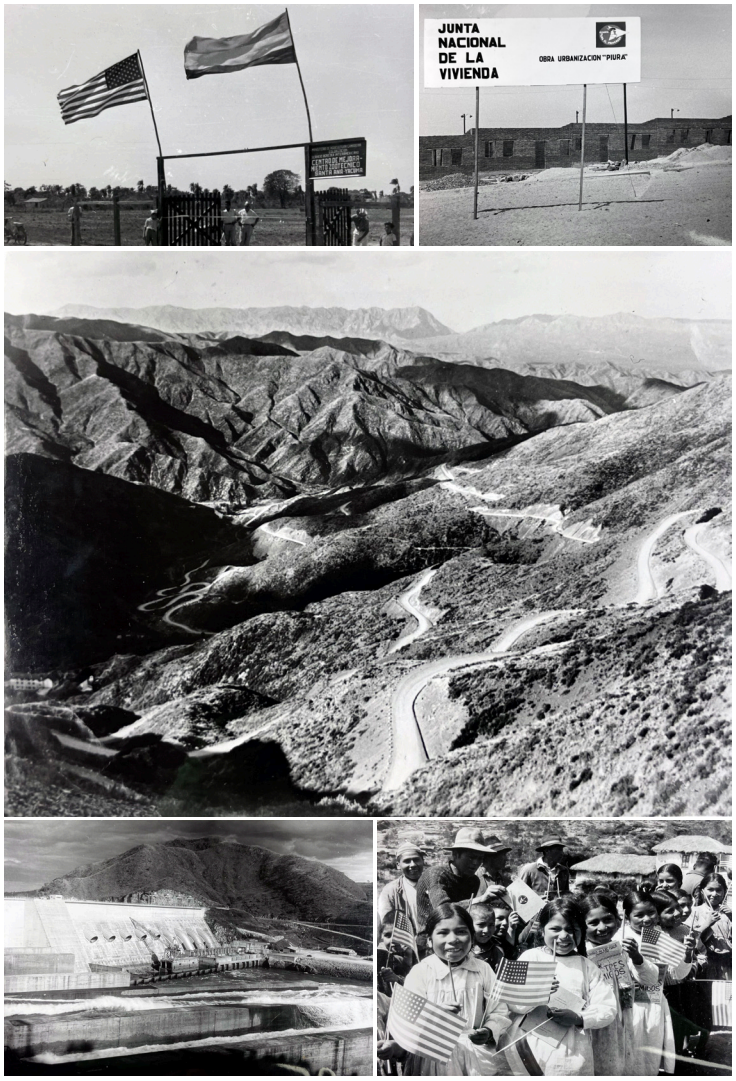
Figs.5-6 Alliance for Progress projects in Costa Rica and Bolivia. Sources: Box 1, Folders 14 and 7, RG286-C, Photographic Prints of Foreign Assistance Activities 1947-1967, US National Archives and Records Administration, College Park, MD (hereafter designated NARA).

providing credits to Paraguayan small farmers for livestock and machinery, strengthening science departments and university programmes in several Central American countries, implementing an irrigation project in Mexico, completing the Quito-Guayaquil highway in Ecuador, and installing runway lighting at a Honduran airport, among many others.[16] figs.5-16 These examples highlight the diverse scales, costs, and types of projects that were funded. As for the required reforms, by the fifth year of the Alliance, fourteen Latin American countries had implemented tax and agricultural reforms, including land redistribution to improve land tenure for illegal occupants.[17] However, the actual progress of these reforms and educational initiatives varied across countries and was perceived as slow and challenging by US observers.[18]

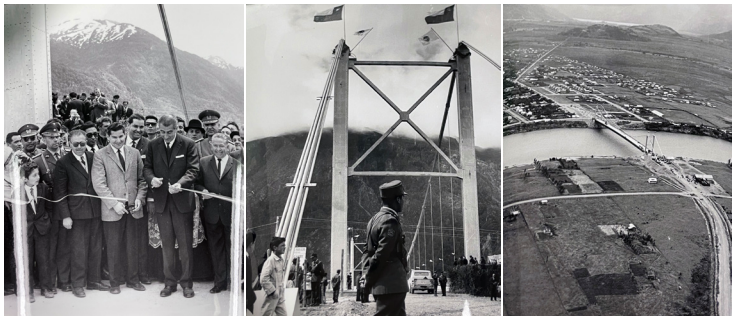
16 Taffet, *Foreign Aid*, 55-7.

17 A review after four years of implementation in 'The Alliance for Progress... an American Partnership' (USAID, December 1965).

18 A review after seven years of implementation in Bureau for Latin American, 'A Review of Alliance for Progress Goals' (Washington DC: USAID, March 1969).



Figs.7-11 Alliance for Progress projects in Bolivia, Peru, Argentina, Brazil. Sources: Box 1, Folder 7, RG286-C, Photographic Prints of Foreign Assistance Activities 1947-1967; Boxes 1, 4, RG306-AFP, Photographs Relating to the Alliance for Progress, NARA.



Figs.12-4 Alliance for Progress project in Chile during Eduardo Frei Montalva presidency. Source: Box 1, RG306-AFP, Photographs Relating to the Alliance for Progress, NARA.

During the Alliance for Progress Brazil, the Dominican Republic, Colombia, and Chile received the majority of funding, representing 60% of the total amount, as shown by researcher Jeffrey F. Taffet.[19] His findings further suggest that these contributions were primarily aimed at supporting political agendas. For instance, in Chile, the support provided backed President Eduardo Frei's Revolution in Freedom campaign, which encompassed reforms in agriculture, education, and a large-scale housing operation.[20] However, a few years later, despite extensive financial support and technical assistance, the US was unable to prevent the democratic election of socialist Salvador Allende in 1970, with the backing of the Communist Party. Political objectives notwithstanding, countries had to develop comprehensive development plans to qualify for Alliance for Progress funding. Although the Alliance had a US-appointed coordinator, there was a committee responsible for reviewing and approving project proposals.

19 Taffet, *Foreign Aid*, 7.
20 Rabe, *The Most Dangerous Area*, 115.

Figs.15-6 Alliance for Progress school and housing project in Guatemala. Source: Box 5, RG286-CF, Photographs from the Country Files ca. 1961 – ca. 2002, NARA.

Teodoro Moscoso, the first US coordinator of the Alliance for Progress, had prior experience in Puerto Rico during Operation Bootstrap, enabling him to expand his ideas continent-wide. He was familiar with aided self-help housing, which continued to receive support. Businessman Willard Garvey of World Homes used Moscoso's words to promote his housing ventures abroad: 'When the day comes that Communists must look for party recruits among workers and farmers who own their own homes–the Communist movement will be dead in Latin America'.[21]

To approve projects funded by the Alliance for Progress, the Charter of Punta del Este established an autonomous panel known as the Committee of Nine, Panel of Nine, or even 'wise-

21 Subcommittee on Housing US Senate, *Study of International Housing* (Washington DC: US Government Print Office, 1963), 193.

Fig.17 John F. Kennedy and the Committee of Nine of the Alliance for Progress at the White House, Washington DC. Source: Abbie Rowe. White House Photographs. John F. Kennedy Presidential Library and Museum, Boston

men'.[fig.17] Members of this panel were proposed by the Secretary General of the OAS, the President of the IDB, and the Executive Secretary of the Economic Commission for Latin America.[22] Their responsibilities included reviewing government-submitted economic and social development programmes, assessing their alignment with the principles of the Act of Bogotá, and determining the institutions responsible for administering financing or technical assistance. Regarding the latter, the IDB and USAID played crucial roles in Alliance for Progress projects, which will be further discussed in the next chapter.

According to Teodoro Moscoso, approximately $100 million was invested in housing projects across ten countries

22 Charter of Punta del Este, 1961, Title V.2 and V.3.

during the first year of the Alliance for Progress.[23] However, the programme's overall progress was slow. By the end of 1963, it had failed to generate the expected momentum and impact. Historian Schlesinger noted that while Moscoso perceived the Alliance as a revolution, 'the aid bureaucracy was not accustomed to running revolutions and crusades'.[24]

Following the assassination of President John F. Kennedy in November 1963, the future of the Alliance for Progress became increasingly challenging. Although his successor, Lyndon B. Johnson, continued the programme, there was a gradual shift in priorities.[25] Teodoro Moscoso was replaced by Thomas Mann, a move perceived by figures like Schlesinger as an attack on those who served in the Kennedy administration.[26] The Cold War era saw other political and economic factors gaining momentum, including the escalation of the Vietnam War led by Secretary of Defence Robert McNamara —his story is covered in the third part of this dissertation.

Criticism of the Alliance for Progress grew within the Johnson administration and the region. In 1966, the Committee of Nine resigned, expressing disappointment with the Alliance's failure to uphold the principles of Punta del Este.[27] Dependency theory, led by economists like Raúl Prebisch, criticized the programme for perpetuating an unequal relationship between 'underdeveloped' and 'developed' countries in the global capitalist economy, hindering the growth of the former.[28] The theory argued that Latin American nations were trapped in a cycle of unequal trade, selling inexpensive raw materials while purchasing

23 Inter-American Economic and Social Council, 'Report of the First Annual Review of the Alliance for Progress' (Mexico City: OAS, November 1962), 43.
24 Schlesinger, *A Thousand Days*, 675.
25 Butterfield, *US Development Aid*, 68.
26 Rabe, *The Most Dangerous Area*, 183.
27 Taffet, *Foreign Aid*, 64.
28 Margarita Fajardo, *The World That Latin America Created: The United Nations Economic Commission for Latin America in the Development Era* (Cambridge, MA: Harvard University Press, 2022), 140-165; Nils Gilman, *Mandarins of the Future: Modernization Theory in Cold War America* (Baltimore: Johns Hopkins University Press, 2003), 234-9; Ekbladh, *The Great American Mission*, 247.

expensive processed goods, resulting in a trade imbalance.[29] Additionally, it was acknowledged that Latin American countries needed a distinct development path. Concerns like this were raised during the formation of the Alliance, with Prebisch, Felipe Herrera, and other Latin American economists emphasizing that: 'We know that Latin America cannot go through the same stages which capitalistic development passed in the course of its historic evolution. We are likewise disturbed at the thought of imitating methods which pursue their economic objectives at the cost of fundamental human freedoms'.[30]

With the arrival of Richard Nixon in 1969, the Alliance for Progress was significantly weakened. Nixon distanced himself from the speeches of his 1960 presidential rival, and during his tenure 'aid as a political tool lost momentum.'[31] There was a shift towards economic support through trade, as reflected in the 1969 Viña del Mar, Chile, consensus, where twenty one Latin American countries requested fair trade with the US in exchange for market strategies.[32] Direct economic aid from the US was reduced, leading to the gradual fading away of the Alliance for Progress.[33] Meanwhile, Nixon pursued an interventionist approach in the region, supporting dictatorships in countries like Argentina, Brazil, Bolivia, Chile, and Uruguay, with figures such as Henry Kissinger playing influential roles during the 1970s.[34]

During the late 1960s and early 1970s, international development programmes, including the Alliance for Progress, faced a crisis and underwent a re-evaluation.[35] The World Bank emerged as a key institution in researching and implementing new develop-

29 Latham, *Right Kind of Revolution*, 162-7.
30 Schlesinger, *A Thousand Days*, 184.
31 Lorenzini, *Global Development*, 129.
32 Taffet, *Foreign Aid*, 188-9
33 Butterfield, *US Development Aid*, 68; Felipe Herrera, 'Twenty-five years of the Inter-American Development Bank', *CEPAL review*, no. 27 (December 1985), 150.
34 Stephen G. Rabe, *The Killing Zone: The United States Wages Cold War in Latin America*, 2nd ed. edition (New York: Oxford University Press, USA, 2015); Stephen G. Rabe, *Kissinger and Latin America: Intervention, Human Rights, Diplomacy* (Ithaca: Cornell University Press, 2020).
35 Gilman, *Mandarins of the Future*, 203-40.

ment programmes, responding to the criticism directed towards previous efforts.[36] In housing, the World Bank took on the responsibility of addressing the decline of USAID and the challenges faced by the IDB in the 1970s. This marked the World Bank's entry into the urban housing agenda for the first time.

* * *

The Alliance for Progress has been regarded as a failure, or a truncated effort, in achieving its overall development and economic goals. However, it did have specific impacts on urban areas, as highlighted by researchers such as Helen Gyger, Andrea Renner, Adrián Gorelik, Leandro Benmergui, and Amanda Waterhouse, among others.[37] Their studies consider the effects of the Alliance on architecture, urban design, and urban planning in Latin America. Leandro Benmergui, for instance, examines the outcomes of development discourses in Buenos Aires and Sao Paulo, revealing the socioeconomic segregation resulting from housing projects.

The Alliance for Progress, despite its limitations, impacted on housing programmes in at least nineteen countries in America. This was made possible through funding mechanisms such as the Social Progress Trust Fund, which facilitated the financing of housing projects administered by the IDB and USAID. The availability of these funds supported the implementation of housing initiatives throughout the region, as it is explored below.

36 Ekbladh, *The Great American Mission*, 223, 252-3; Latham, *Right Kind of Revolution*, 167-75; Mark Mazower, *Governing the World: The History of an Idea, 1815 to the Present* (London: Penguin Books, 2012), 298-99.
37 Helen Gyger, 'The Informal as a Project: Self-Help Housing in Peru, 1954-1986' (Ph.D. Dissertation, New York, Columbia University, 2013); Renner, 'Housing Diplomacy'; Benmergui, 'Housing development'; Waterhouse, 'Grassroots Architects'; Adrián Gorelik, *La ciudad latinoamericana: Una figura de la imaginación social del siglo XX* (Buenos Aires, Argentina: Siglo XXI Editores, 2022).

2

IDB and USAID's housing operations in Latin America

Between 1961 and 1971, the IDB invested approximately $430 million in the region, financing forty-five housing projects across South, Central, and North America as part of the Alliance for Progress.[1] fig.18 However, construction was just one of the strategies used by the Alliance to promote housing development in the region. The IDB also supported fifty-seven housing-related technical collaboration projects in fifteen countries. These included the creation of new administrative or financial institutions, the development of national housing programmes, seminars on housing management, and the establishment of Savings and Loan programmes, among others. USAID also strongly supported the latter programmes to increase homeownership growth on the continent.

The IDB and USAID were the leading organizations administering the Alliance for Progress housing funds, expanding the beneficiaries from low-income people to the middle class through available financing and foreign policies. This chapter examines the impacts on the built environment in Latin American cities, not only through the financing of built projects but also through support for the institutional, political, administrative, and financial organisation of housing in different countries.

Inter-American housing. Inter-American Development Bank

The IDB was established in 1959 through an agreement signed by seventeen Latin American and Caribbean countries, along with the US, under the auspices of the Organisation of Ameri-

1 Official information on project statistics published on the institution's website www.iadb.org/en/projects accessed on 18 May 2023.

Fig.18 Housing and technical assistance loans from the IDB until 31 December 1962. Source: IDB, *El BID y la vivienda*, 45.

can States (OAS). It was headquartered in Washington DC, due to 'convincing technical and practical reasons.'[2] Its primary goal was to accelerate economic and social development in the region's member countries.

The idea of establishing an inter-American bank was first discussed during the Ninth International American Conference in Bogotá, Colombia, in 1948, as the countries sought to achieve economic collaboration similar to that of the Marshall Plan. Years later, concrete inter-American cooperation ideas were proposed at the Special Economic Conference in Quitandinha, Brazil, in 1954. Thereafter, a group of experts from nine Latin American countries met in Santiago de Chile to prepare a document for the OAS to create a regional financial body. It was not only after the 1957 OAS Economic Conference in Buenos Aires, Argentina, that the President of Brazil presented Operation Pan-American to the US, in 1958, which was key to the creation of the IDB.[3] The US announced its readiness to participate in a regional financial organisation at a special meeting of the Inter-American Economic and Social Council held in Bogotá in August 1958.[4] Finally, the agreement establishing the IDB was signed in April 1959 and came into force in December of that year.[5] Chilean economist Felipe Herrera was elected as the first IDB president in 1960 and remained in office for three terms, until 1971[6] —up to 2020, all IDB presidents were Latin American citizens.

The IDB implemented projects in its Latin American and Caribbean member countries, while other members —initially only the US— could only offer goods and services to carry

2 Herrera, '25 years of the IDB', 145.
3 Taffet, *Foreign Aid*, 18.
4 Herrera, '25 years of the IDB'; Schlesinger, *A Thousand Days*, 172.
5 A timeline with this and other related events in Caballero Argáez, *Lleras Camargo*, 148-53; Bevan Sewell, *The US and Latin America: Eisenhower, Kennedy and Economic Diplomacy in the Cold War* (New York: I.B. Tauris, 2015), 105-8.
6 Felipe Herrera had already served as General Manager of the Central Bank of Chile and Executive Director of the IMF representing the Southern Cone.

out the projects and contribute to the bank's coffers. Canada became the first non-Latin American member, other than the US, to join the bank in 1972.[7] Initially, a large percentage of the IDB's portfolio was dedicated to supporting infrastructure construction, such as transport, telecommunications, and energy production, to promote the integration of isolated areas within the countries. There was also an emphasis on urban development due to the high concentration of population in Latin American cities.[8]

During the Alliance for Progress, the IDB implemented housing projects that were financed mainly through the $394 million SPTF fund, committed following the Act of Bogotá of 1960.[9] The Act recognised the built environment as a means of achieving social improvement through comprehensive neighbourhoods. Its objectives were to enhance housing and community facilities by examining existing policies, promoting private initiatives, and encouraging financial institutions to invest in low-cost housing and construction industries. Additionally, it emphasized strengthening legal and institutional frameworks, expanding home-building industries through training and research, and developing construction standards for low- and medium-cost housing.[10]

For its part, the IDB outlined its housing policies emphasizing the importance of programmes that mobilize domestic resources for private homeownership and include elements of self-help to reduce initial costs. To address the housing crisis in the region, the bank urged national and private housing finance institutions to improve efficiency and create or expand local housing construction and finance industries that focus on affordable housing for low and lower-middle income households.[11]

7 Currently, the IDB has 22 non-Latin American and Caribbean member countries.
8 Herrera, '25 years of the IDB', 146.
9 Schlesinger, *A Thousand Days*, 172; Sewell, *The US and Latin America*, 125-8.
10 Act of Bogotá, 1960, Title. I.B.
11 Timothy Atkeson, 'Aid for Latin American Housing', *George Washington Law Review* 31, no. 3 (1963), 561-5.

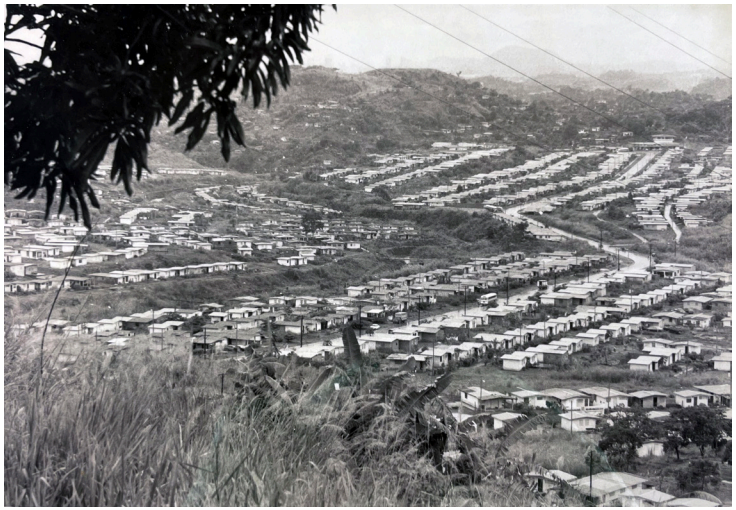


Fig.19 San Miguelito housing project in Panama. First IDB funded housing project. Source: Box 14, RG286-CF, Photographs from the Country Files ca. 1961 – ca. 2002, NARA.

In the initial year of the Alliance for Progress, the IDB had already provided support for the construction of approximately 105,000 housing units across sixteen countries in the region.[12] 'San Miguelito, El Techo, Ventanilla, are new names already incorporated into the urban geography of Latin America.'[13] This is how the IDB reported in a 1963 publication on large-scale housing projects financed in Panama, Colombia and Peru —which are described in the following chapter. San Miguelito in Panama became the first housing project to receive funds from the IDB.[14] fig.19 During a visit to the site, Felipe Herrera recognized the opportunity presented by the local government's efforts, which could potentially serve as

12 Projects located in Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Panama, Peru, Uruguay, and Venezuela. US Senate, *Study of International Housing*, 409.
13 Information Division IDB, *El BID y la vivienda* (Washington DC: IDB, 1963), 20.
14 IDB, *El BID y la vivienda*, 22

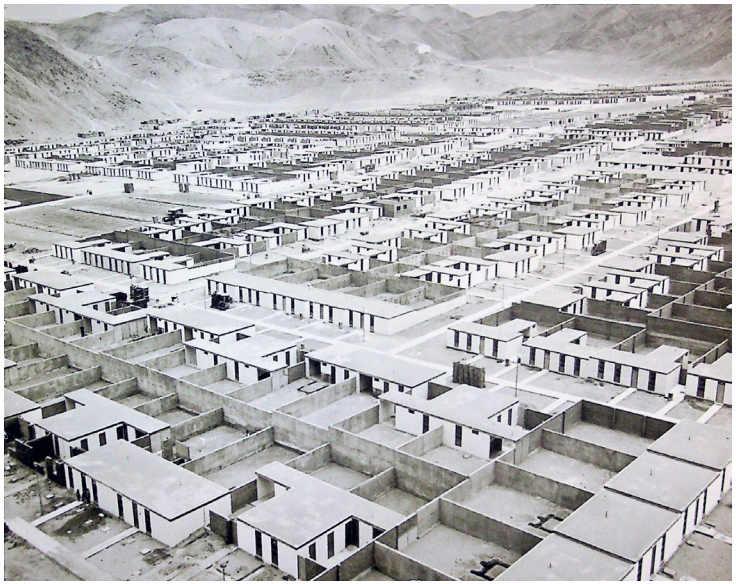


Fig.20 Ciudad Satélite de Ventanilla in Peru. IDB funded housing project. Source: IDB, *El BID y la vivienda*, 3.

a model for other countries. The project encompassed both single-family homes and some multi-storey buildings, providing accessible housing options for individuals who had previously resided there in informal settlements. Subsequently, further large-scale projects emerged, such as Techo in Colombia and Ventanilla in Peru, accommodating 80,000 inhabitants each.[fig.20] Additionally, smaller initiatives like Santa Ana in El Salvador were established, with plans to construct 5,000 houses across the entire country.[fig.23] Furthermore, housing programmes were implemented in the countryside, like in Venezuela, where 'modern rural housing is replacing the typical 'ranchos".[15] [fig.24]

15 IDB, *El BID y la vivienda*, 13

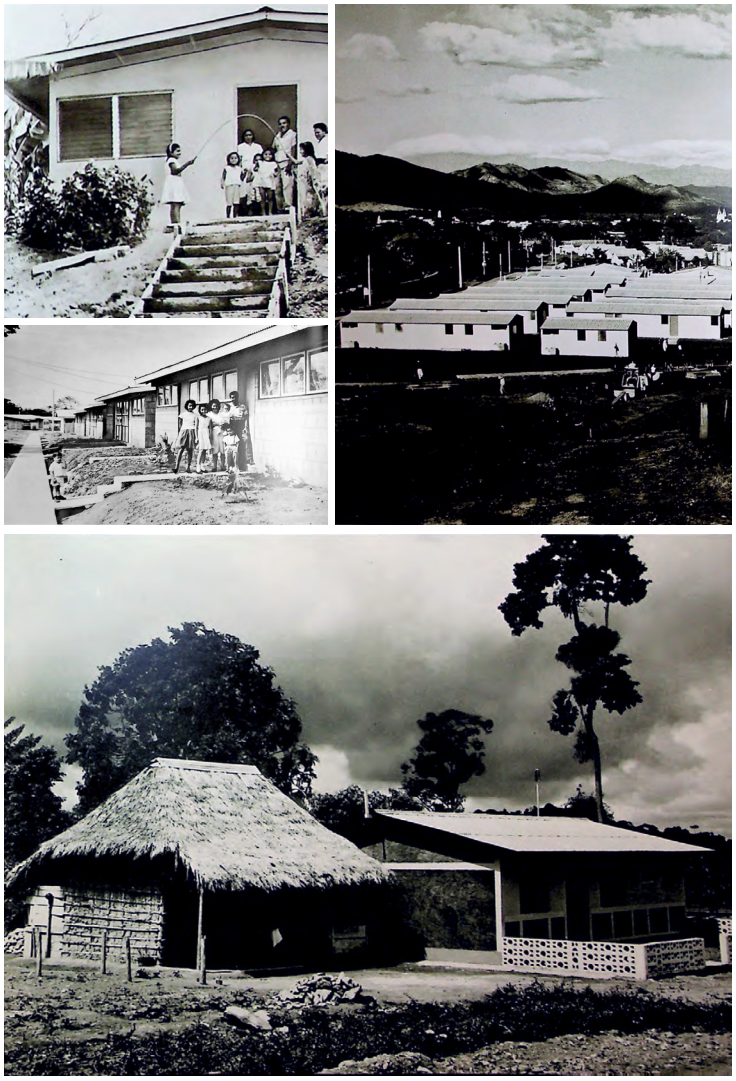


Fig.21-4 Housing projects in San Miguelito, Panama; Costa Rica; Santa Ana, El Salvador; rural housing in Venezuela. Source: IDB, *El BID y la vivienda*, 13, 28, 29, 34.

Housing projects funded by the IDB faced criticism during the late 1960s due to difficulties in replicating the projects, loan repayment challenges, and a focus on finished houses that increased costs. Eduardo Rojas, who served as IDB's Principal Specialist in Urban Development and Housing between 1989 and 2010, shared these criticisms, highlighting that the projects mainly benefited the middle classes and did not adequately support low-income families, even with high subsidies.[16] As a result, the IDB ceased funding housing construction in the 1970s, with only three projects being supported during that decade. As discussed in the third part of the dissertation, the World Bank stepped in to fill this gap.

Shaping progress.
US Agency for International Development

USAID was established in 1961, at the beginning of the Kennedy administration. It merged various foreign aid programmes previously existing within the US government, including the ICA and the Development Loan Fund (DLF). While the ICA had focused on technical assistance, the DLF represented an initial shift towards investing financial resources in developing countries.[17]

Modernization ideas informed the approach of USAID to foreign aid.[18] Mentioned scholars such as Rostow, Millikan, and Pye proposed, among other ideas, that 'the true role of foreign aid was neither military nor technical assistance but the organised promotion of national development'.[19] Millikan played a significant role in drafting USAID's first proposal to Kennedy, which emphasized economic assistance.[20] In the 1960s 'technical assistance took a back seat except when it involved economic policy reform and planning,' representing a departure from the Truman and Eisenhower administrations.[21] The belief was that economic growth would lead to social development, including improvements in housing.[22] Millikan and Pye continued to advise USAID, ensuring that modernization ideas persisted.[23] Among the concepts spreading in the agency was that for developing countries to achieve self-sustaining economic growth, they needed structural changes, land reform, political development, and other social and cultural adjustments, which would create stronger national independence in a 'long-run association with the West'.[24]

To qualify for assistance, recipient countries were required to devise comprehensive, long-term development plans. In housing, the allocation of resources was intended to optimize their impact on the nation's overarching developmental objectives. These strategies might emulate methods employed by US state and regional planning and economic development agencies, which had benefited from HHFA programmes. Such methods were deemed suitable for the development and execution of sound national and urban development programmes in developing nations.[25]

> U.S. interests in housing assistance, however, are not solely economic. Poor housing may be a significant factor in matters of health, family stability, moral values, and political unrest.[26]

As quoted above, USAID's general policies on housing intertwined economic and social factors with political ones to jus-

16 Eduardo Rojas, 'The IDB in Low-Cost Housing: The First Three Decades' (IDB, February 1995); Eduardo Rojas, ''No Time to Waste' in Applying the Lessons from Latin America's 50 Years of Housing Policies', *Environment and Urbanization* 31, no. 1 (1 April 2019): 177–92.
17 Atkeson, 'Aid for Latin American', 557-8.
18 Lorenzini, *Global Development*, 64-7.
19 Schlesinger, *A Thousand Days*, 512.
20 Ibid., 516.
21 Butterfield, *US Development Aid*, 62.
22 Atkeson, 'Aid for Latin American', 548.
23 Michael E. Latham, *The Right Kind of Revolution: Modernization, Development, and U.S. Foreign Policy from the Cold War to the Present* (Ithaca: Cornell University Press, 2010), 57.
24 Schlesinger, *A Thousand Days*, 513.
25 US Senate, *Study of International Housing*, 397.
26 Ibid., 395-6.

tify US investments abroad. The agency emphasized economic development aspects, such as encouraging homeownership through institutions like Savings and Loan, to stimulate investment. Urban development was part of the international development agenda, stressing the importance of building neighbourhoods with not only houses but also water and sewage systems, improved streets and highways, schools, and social and community services.[27]

Building Foundations. Instruments and funding for housing development

The DLF provided funding for various operations in Latin America, including the establishment of Savings and Loan systems that enabled individuals to access mortgage loans and receive support with investment and savings strategies, facilitating their acquisition of private property. The DLF also offered technical assistance to create, strengthen, or reformulate Latin American institutions and legislation. Building on the DLF's legacy, the IDB and USAID expanded the Savings and Loan system, leveraging the successes of programmes like Chile's, which demonstrated positive outcomes even in the face of inflationary pressures.[28]

As early as 1962, USAID supported existing Savings and Loan institutions in the Dominican Republic, Ecuador, Panama, Peru, Chile, and Venezuela with seed capital, while also providing consultancy services, such as drafting legislation, in Colombia, Costa Rica, El Salvador, Nicaragua, and Panama. Timothy Atkeson, DLF Deputy General Counsel and later USAID Regional Counsel for Latin America, cited Chile's Caja Central as a case in point for Latin America. However, he cautioned that the housing standards it supported favoured the middle class, as they had a higher sale value than low-income people could afford.[29] In

27 US Senate, *Study of International Housing*, 396-7.
28 Atkeson, 'Aid for Latin American', 557-6; IDB, *El BID y la vivienda*, 17.
29 Ibid., 570.

Colombia, among other local initiatives, an attempt was made to combine Savings and Loan strategies with aided self-help to lower construction costs and reach the lowest-income people.

USAID continued to administer various instruments and funds, including Housing Investment Guarantees (HIG) and Cooley Loans. The HIG exported a financing model from the Federal Housing Administration (FHA) that was applied within the US, this time backing US companies by guaranteeing their investments in housing construction abroad. The purpose was to support US pilot projects that would introduce replicable innovation in local countries.[30] The first project was financed in Colombia, building 2,000 homes through ICT working with a Puerto Rican construction company.[31]

Historians Kwak and Renner traced various instruments and policies endorsed by the US government to explore how US entrepreneurs expanded their housing markets abroad.[32] Regarding HIG, Renner describes the journey of IBEC executive Rodman C. Rockefeller, who visited various IDB and USAID divisions until the company secure a guarantee for the construction of 506 houses in Salamanca, Peru. The project was approved because it demonstrated 'how to use long-term financing and large-scale production to build middle-class housing.'[33] IBEC ultimately built around 1,500 homes in Salamanca and secured another guarantee to build 546 housing units in Arequipa, southern Peru. Renner notes that IBEC constructed 'FHA-type housing developments (...) which spread US-style suburbs into Latin America for the region's middle class'.[34] Similarly, the fifth chapter explores housing projects in Bolivia that underwent adjustments to align more closely with US urban models that the FHA could insure.

30 Atkeson, 'Aid for Latin American', 565-7; 573-4; Renner, 'Housing Diplomacy', 213-23.
31 US Senate, *Study of International Housing*, 410.
32 Kwak, *A World of Homeowners*, 127-65; Renner, 'Housing Diplomacy', 170-227.
33 Renner, 'Housing Diplomacy', 220-1.
34 Ibid., 222.

The Cooley Loan was another instrument used by USAID to facilitate US entrepreneurs' entry into foreign housing construction markets. This type of loan became operational following an amendment to Public Law 480 (PL480), the Agricultural Trade Development and Assistance Act, which was legislated in 1954. That Act enabled 'friendly nations'[35] to purchase US surplus agricultural commodities in their local currency, making it a more attractive option than others. The US also offered alternatives for investing part of the proceeds in the local country, including developing new markets for US agricultural commodities, or procuring military equipment, facilities, and services for common defence, among other options. The loan was invested in local currency in the country, and the long-term repayment could be returned to the US in US dollars.

The Cooley amendment, implemented in 1957, broadened the range of possible applications for the funds to include business development and trade expansion purposes for US companies and their affiliates. Willard Garvey, the mentioned wheat entrepreneur from Wichita, US, saw this as an opportunity to finance housing construction in 'friendly nations.' To accomplish this, it was necessary to demonstrate that housing could be included among investments aimed at promoting economic development overseas. The fourth chapter shows the strategies that Garvey employed through World Homes, including leveraging arguments under the Cold War tensions, partnering with local Savings and Loan institutions, and utilizing both Cooley Loans and Housing Investments Guarantees.

* * *

35 'As used in this Act, 'friendly nation' means any country other than (1) the U.S.S.R., or (2) any nation or area dominated or controlled by the foreign government or foreign organization controlling the world Communist movement' in Agricultural Trade Development and Assistance Act of 1954. U.S.C. (Public Law 480).

The availability of financial assistance from the Alliance for Progress, including the SPTF, Housing Investment Guarantees or Cooley Loans, facilitated rapid investment by the IDB and USAID in housing projects across multiple Latin American countries. The following section explores the architectures of 1960s development via satellite cities and neighbourhood units, which extended private homeownership to reach the middle classes.

Fig.25 Following the death of John F. Kennedy, Vila Progresso was renamed as Vila Kennedy, and a miniature sculpture of the Statue of Liberty was installed. Image: Vila Kennedy, 1964. Source: Public Archive for the State of Rio de Janeiro reproduced in www.bbc.com/portuguese/brasil-43720716 accessed 17 May 2023.

3

Inter-American trajectories of Satellite cities and Neighbourhood units' ideas

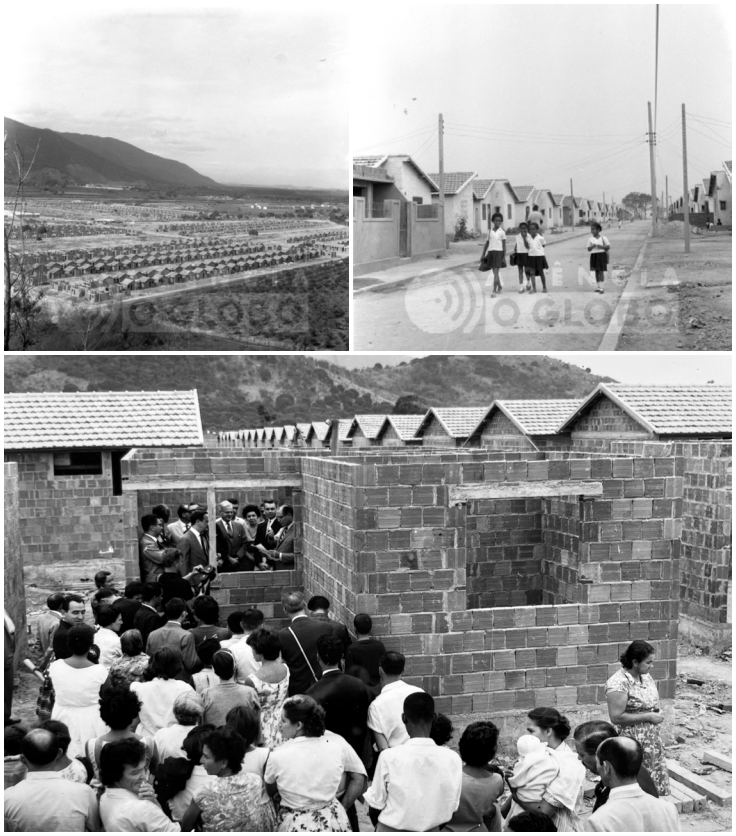
Vila Aliança and Vila Progresso [Alliance and Progress] were two housing projects financed in Brazil during the 1960s using instruments like PL480.[figs.25-7] These vilas were designed as self-contained neighbourhood units within satellite cities situated on the outskirts of Rio de Janeiro, comprising 2,187 and 5,069 dwellings, respectively. Planned with community facilities to foster social progress, they underwent various changes, as extensively researched by Leandro Benmergui within the context of the Alliance for Progress.[1] Among the project's outcomes were the emergence of social segregation and challenges encountered during facility construction. Additional issues were brought to the attention of key Alliance for Progress figures, including Lincoln Gordon, then US ambassador to Brazil, and Teodoro Moscoso, Alliance coordinator, when they gathered in Vila Aliança in 1962.[2] [fig.28] This event faced criticism from residents who expressed dissatisfaction with their new neighbourhoods. Among the various concerns raised, they expressed worries about transitioning from rent-free —informal— settlements in Rio de Janeiro to homeownership and credit repayments.[3]

The occupation of Vila Aliança preceded the completion of the community facilities, leading USAID to focus more attention on Vila Progresso. Amenities in the latter included schools, community centres, parks, a police station, and even clothing facto-

1 Leandro Benmergui, 'Building the Alliance for Progress: Local and Transnational Encounters in a Low-Income Housing Program in Rio de Janeiro, 1962–67', in *Making Cities Global: The Transnational Turn in Urban History*, ed. A. K. Sandoval-Strausz and Nancy H. Kwak (Philadelphia: University of Pennsylvania Press, 2018), 71–97; Leandro Benmergui, 'The Alliance for Progress and Housing Policy in Rio de Janeiro and Buenos Aires in the 1960s', *Urban History* 36, no. 2 (2009), 303–26; Benmergui, 'Housing development'.

2 Benmergui, 'Housing development', 154-7.

3 Juan de Onis, 'Brazilians Wary on Aid Benefits. Poor Still Skeptical After Moscoso Talk on Alliance', *The New York Times*, 19 August 1962.



Figs.26-8 (top) Vila Aliança, source: Agência O Globo. (bottom) Moscoso and Gordon in Vila Progresso, source: Box 1, Folder 8, RG286-C, Photographic Prints of Foreign Assistance Activities 1947-1967, NARA.

Moradores da Vila Aliança Reclamam Contra a Falta de Transporte Para o Centro

Rio de Bairro em Bairro

Vila Kennedy: Um Mundo de Problemas e Desilusões

Figs.29-30 In 1968, despite USAID's objectives tu build community facilities in Vila Kennedy, the press highlighted various issues in the neighbourhood, including unemployment, and inadequate healthcare, policing, schooling, transport, and lighting. These problems, similar to those reported in Vila Aliança in 1965, were detailed in 'Vila Kennedy: Um Mundo de Problemas e Desilusões', *O Globo*, 15 May 1968, Morning edition, sec. General; 'Moradores de Vila Aliança Reclaman contra a Falta de Transporte Para o Centro', *O Globo*, 10 May 1965, Morning edition, sec. General.

ries, craft cooperatives, and bakeries.[4] In Progresso, Benmergui also highlights the urban design experimentation using a super-block featuring a central square to encourage community interaction and promote urban diversity, an urban element found in several projects, as shown later in the dissertation.[5]

The primary issues of segregation in both vilas stemmed from their disconnection from urban centres.[fig.29-30] Vila Progresso, located over 30 kilometres away from central Rio de Janeiro, required long commutes of more than two hours to access employment opportunities, as the planned construction of a nearby steel mill did not materialize.[6] Moreover, these urbanisations predominantly housed people with limited economic resources who were displaced from favelas through a programme initiated by the Government of Guanabara with support from Alliance for Progress funds.[7] [fig.31-2]

4 Benmergui, 'Housing development', 192-4.
5 Ibid., 198.
6 Morris Juppenlatz, *Cities in Transformation. The Urban Squatter Problem of the Developing World* (St. Lucia: University of Queensland Press, 1970), 75-8.
7 Benmergui, 'Housing development', 204-13; Juppenlatz, *Cities in Transformation*, 75.

NA GUANABARA VOCÊ VÊ O QUE O GOVÊRNO FAZ!

ESCOLAS — O plano educacional do Estado da Guánabara cumpriu tôdas as etapas previstas para 24 meses de administração: * ensino primário obrigatório (hoje, na Guanabara, nenhuma criança deixa de estudar por falta de escola); * extinção do déficit escolar; * construção de novas escolas, acréscimo de salas e criação de classes em cooperação com instituições particulares; * ampliação da rêde de estabelecimentos secundários oficiais; * concessão de bôlsas de estudo; * expansão dos cursos normais para formação de novas professôras.

SAÚDE — No setor da assistência médico-sanitária, os resultados obtidos com a campanha contra a poliomielite foram surpreendentes. 438 mil crianças, de idade entre 4 meses e 6 anos foram imunizadas - permitindo à Guanabara bater o recorde Sabin com um índice de 93%. Cabe destacar outra iniciativa vitoriosa, realizada em 1962: a campanha da erradicação da varíola estendida a favelas e subúrbios, quando 3 milhões de pessoas de mais de seis meses de idade foram vacinadas ou revacinadas.

HABITAÇÃO — O Rio tem um milhão de favelados distribuído em mais de 200 favelas. Miséria. Desconfôrto. Falta de higiene. Êsse quadro degradante justifica a atenção prioritária do Govêrno para o trabalho que vem realizando a fim de possibilitar melhores condições de vida para o favelado e sua integração na comunidade. A Vila Aliança, já concluída, dispõe de 2.250 residências dotadas de quarto, cozinha, banheiro, luz elétrica, água e esgotos. Cada casa poderá ser ampliada pelo próprio favelado, com auxílio do Govêrno, até seis, três quartos, varanda e quintal.

Figs.31-2 (top) Housing and eradication programme in the former state of Guanabara, Brazil. Source: 'Na Guanabara você vê o que o govêrno faz!', *O Globo,* 12 December 1969, Morning edition, sec. General. (bottom) The back of the photograph reads: 'Moving day - People carry mattresses and other possessions to the truck which will take them to their new homes in the 'Bairro Alianca' Source: Box 1, RG306-AFP, Photographs Relating to the Alliance for Progress, NARA.

Vila Aliança and Vila Progresso exemplified the concept of self-contained neighbourhood units within satellite cities, following a similar urban model observed in numerous other housing projects supported by the Alliance for Progress. The idea of neighbourhood units, initially proposed by planners like Clarence Perry, was translated into initiatives that combined housing with community facilities. This concept gained widespread adoption by international and local institutions, becoming a transnational phenomenon implemented across the American continent. This chapter explores the trajectory of satellite cities and neighbourhood unit ideas, examining the interactions between foreign and local experts and organizations, and analysing their implementation and impact on the urban landscape of various countries within the context of the modernization ideas disseminated during the Cold War.

Satellite Cities / Ciudades Satélite

Satellite cities, also called 'satellite towns' or 'secondary cities,' can take various forms and functions. Scholars have studied emblematic examples such as Venezuela's Ciudad Guayana and Brazil's Brasilia, newly urban centres designed to fulfil specific objectives, such as bolstering industrial zones or serving as political capitals. Ciudad Guayana has been examined by historians such as Adrián Gorelik and Ijlal Muzaffar, who analysed the regional planning in light of the strong influence of the MIT-Harvard Joint Center for Urban Studies.[8] However, the focus of this chapter diverges from these iconic cases as it delves into a distinct category of satellite cities.

The satellite cities discussed here comprise clusters of neighbourhood units built on the outskirts of Latin American cities in response to severe housing shortages by the end of the 1950s. As high-

8 Gorelik, *La ciudad latinoamericana.* 222-45; Ijlal Muzaffar, 'Fuzzy Images: The Problem of Third World Development and the New Ethics of Open-Ended Planning at the MIT-Harvard Joint Center for Urban Studies', in *A Second Modernism: MIT, Architecture, and the 'techno-Social' Moment*, ed. Arindam Dutta (Cambridge: The MIT Press, 2013), 310–41.

lighted in the first part, a significant portion of the urban population in Latin America is concentrated in a few major cities, which not only served as primary centres for employment, education, and healthcare but also faced substantial housing crises. To address this deficit, satellite cities like Vilas Aliança and Progresso were established on the outskirts of Rio de Janeiro, alongside similar developments, including Ciudad Ventanilla in Lima, Ciudad Hatillo in San José, and Ciudad Techo in Bogotá. Referred to as 'ciudades satélite' in Spanish, these satellite cities were designed as self-contained neighbourhood units equipped with community facilities while remaining reliant on the adjacent cities for certain services. The adoption of the neighbourhood unit concept in these housing projects reflects a shared architectural and urban design trajectory across the Americas, which the Alliance for Progress further intensified.

Neighbourhood Planning

In his 1954 essay, *The Neighbourhood and the Neighbourhood Unit*, historian Lewis Mumford traced the origins and trajectories of neighbourhood planning, which replaced, for example, traffic avenues as a unit of city design.[9] This approach proposed the neighbourhood, consisting of both housing and community institutions, as the minimum unit of the urban fabric. Mumford also warned about the potential for segregation based on race, caste, or income that could arise from this scheme. While planner Clarence Perry is commonly regarded as the sole proponent of neighbourhood unit due to his influential work *The neighbourhood unit: A scheme of arrangement for the family-life community*, published in 1929, Mumford noted that this movement involved multiple proponents whose ideas intersected and diverged across various disciplines. For instance, Perry's ideas were influenced by sociologists such as

9 Lewis Mumford, 'The Neighbourhood and the Neighbourhood Unit', *Town Planning Review* 24:4 (January 1954), 256-70.

Fig.33 Preliminary study at Radburn, New Jersey. Source: Survey of New York and its Environs, Vol 7. (1929).

Charles Horton Cooley, who emphasized social organization in 'face-to-face communities' centred around the family.[10]

Urbanist Peter Hall discussed Perry's neighbourhood units within the context of the garden-city tradition in North America, alongside the ideas of Ebenezer Howard and the work of Clarence Stein and Henry Wright, specifically the Radburn layout of 1928.[11] fig.33 Hall and Mumford further built upon the ideas of town planners like Raymond Unwin, who outlined the diverse uses that a city area should encompass, although he does not refer directly to the concept of a neighbourhood.[12] Thus, Perry's contribution was providing concrete details of a neighbourhood unit.

10 Mumford, 'The Neighbourhood', 259.
11 Peter Hall, *Cities of Tomorrow: An Intellectual History of Urban Planning and Design since 1880*, Fourth edition (Hoboken, NJ: Wiley-Blackwell, 2014).133-144.
12 Mumford, 'The Neighbourhood', 259-62.

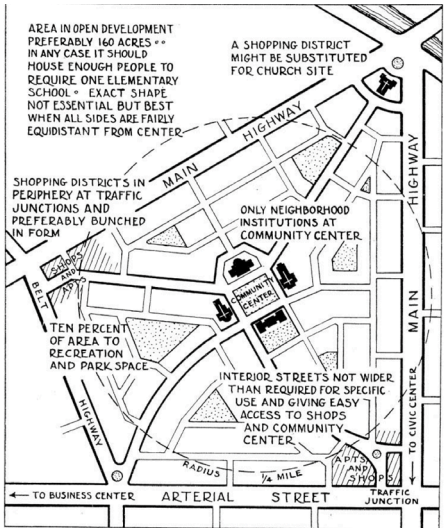


Fig.34 Clarence Perry neighbourhood unit diagram. Source: Survey of New York and its Environs, Vol 7. (1929).

Perry's work moved planning by neighbourhoods 'from a mere cohabitation to the creation of a new form and institutions for a modern urban community.'[13] His unit was based on a neighbourhood containing single-family dwellings with an elementary school accessible to the children.[fig.34] By quantifying schools in the US with 800 to 1,500 students, Perry arrived at an ideal neighbourhood of 4,800 to 9,000 people.[14] The school, church, and community institutions would be centrally located within the neighbourhood, accompanied by small parks occupying at least ten per cent of the area. The shopping district could include stores, banks, and garages, among other programmes. Arterial streets would define the neighbourhood's boundaries, connecting it to metropolitan-scale job centres and civic hubs, while the inner

13 Mumford, 'The Neighbourhood', 260.

14 Jason S. Brody, 'Constructing Professional Knowledge: The Neighborhood Unit concept in the community builders handbook' (Ph.D. thesis, Urbana, University of Illinois at Urbana-Champaign, 2009), 53.

streets would be designed to reduce traffic. These projects could take various forms, from neighbourhoods with isolated houses to flat configurations in densely populated areas.

Researcher Jason S. Brody extensively reviewed the adoption and disemination of Perry's ideas through US institutions in the 20th century.[15] Among them, the Federal Housing Administration (FHA) adopted the urban model as early as the 1930.[16] FHA required or recommended standards for developments applying for mortgage or construction loan insurance. They also offered supplementary advice that incorporated the ideas of the neighbourhood unit and, as will be reviewed below, the FHA also exported its housing construction insurance requirements to Latin America in the context of the Alliance for Progress. In addition to the FHA, Banerjee and Baer, and Brody emphasized the influence of the neighbourhood unit through the *Planning the Neighbourhood* handbook published by the American Public Health Association (APHA) in 1948.[17] This document served as the 'standard text for professional planners working in local government'.[18]

Planning the Neighborhood, written by Anatole Solow and Ann Copperman, is relevant to the inter-American trajectory of ideas discussed below. In the previous section, Solow's support for establishing CINVA was shown. In addition, researcher Alejandro Bonilla traced Solow's encounters with various architects and planners in the region while working as a consultant in countries such as Panama, Guatemala, and primarily Costa Rica.[19] His work examined Solow's role in Ciudad Hatillo, San José, in connection with CINVA studies, contributing to the trajectory of ideas explored in this study.

15 Brody, 'Constructing Professional Knowledge'.

16 Ibid., 75-111.

17 Brody, 'Constructing Professional Knowledge', 90-2; Tridib Banerjee and William C. Baer, *Beyond the Neighborhood Unit: Residential Environments and Public Policy*, Environment, Development, and Public Policy. Environmental Policy and Planning (New York: Plenum Press, 1984), 24-7.

18 Brody, 'Constructing Professional Knowledge', 90.

19 Alejandro Bonilla, 'San José, ville globale: Assistance technique, circulation des savoirs et planification urbaine au Costa Rica, 1927-1986.' (Ph.D. Dissertation, Paris, École des Hautes Études en Sciences Sociales, 2021), 253-7.

In the first paragraph of *Planning the Neighborhood*, Solow and Copperman quote Perry's definition of a neighbourhood unit and propose it as the minimum planning unit. In turn, in the third paragraph, they suggest that the neighbourhood size should be based on the capacity of an elementary school, ranging from 2,000 to 8,000 people, with 5,000 being the desirable size, similar to Perry's concept but condensed to smaller communities. The school should be situated in the centre of the neighbourhood, within a half-mile distance from all families. Community facilities should provide for educational, social, cultural, recreational, and shopping activities. Employment and urban centres, including governmental institutions, should be located outside the neighbourhood within a twenty to thirty-minute commute, while outdoor recreational facilities should be accessible within thirty to forty-five minutes.[20]

Solow and Copperman included an annotated bibliography focused mainly on institutional texts and legal norms, with Perry being the most cited author. They emphasised Perry's contribution to planning neighbourhoods in densely populated metropolitan areas. Additionally, they referenced the work of Stein and Wright on low-density groups, site plans and floor plans. They included a Catherine Bauer's article that criticised the potential for segregation and racial discrimination in these neighbourhoods. Among a few other authors, they mention architects such as Ludwig Hilberseimer, Josep L. Sert, and Louis Kahn as general references in neighbourhood planning and design, with a reference to CIAMs. Figures such as Ebenezer Howard, Raymond Unwin, or Charles Horton Cooley are absent from their bibliography.

The neighbourhood unit concept gained traction in the US through institutions like the FHA, which then demanded these standards in Latin America. The following explores the interpretation and adaptation of the neighbourhood unit ideas in Latin

20 Ann Copperman and Anatole Solow, *Planning the Neighbourhood* (Chicago: American Public Health Association, 1948).

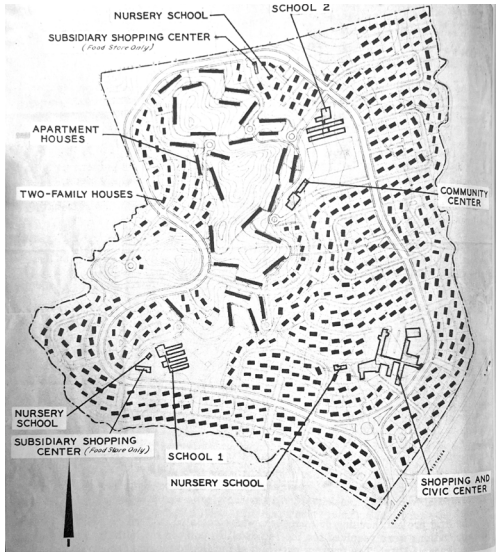


Fig.35 Vista Hermosa Neighbourhood, Panama, preliminary design. Source: Violich, *Low-Cost Housing*, 40.

America during the 20th century, with Solow as part of that trajectory. Modifications will be observed, such as including industrial zones adjacent to the neighbourhoods.

Inter-American trajectories of neighbourhood units' ideas

The Vista Hermosa Neighbourhood [Beautiful View Neighbourhood] was a self-contained community designed to accommodate 1,500 families three miles from Panama City. It comprised one- and two-family houses arranged on the periphery, apartments on high ground, and featured two schools, a civic centre, shopping areas, child nurseries, and a social centre.[figs.35-6] The surrounding topography influenced the major circulation, connected to the new highway to the city.[21] This description is taken from the book *Low-*

21 Francis Violich, *Low-Cost Housing in Latin America*, ed. Anatole Solow (Washington DC: Pan-American

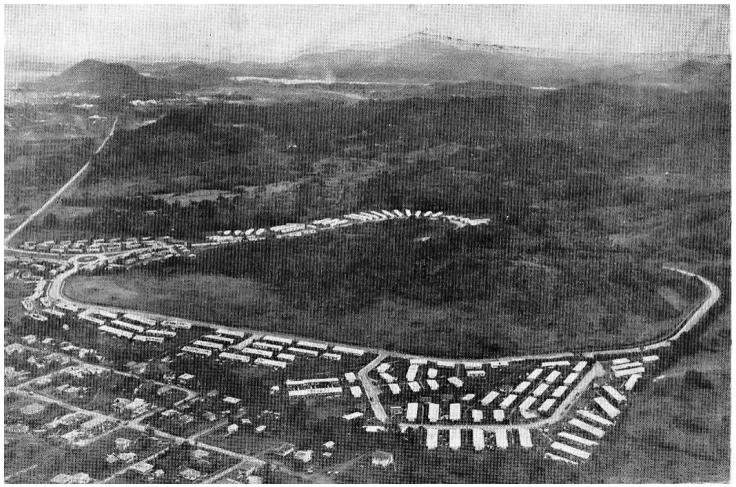


Fig.36 Vista Hermosa in construction, 1949 in Rubio, *La Ciudad de Panamá*, 101 reproduced in www.panurbis.wordpress.com/2021/09/08/betania/ Accessed May 13, 2023.

cost Housing in Latin America, authored by Francis Violich and edited by Solow under the auspices of the Pan-American Union. Notably, Solow collaborated with Panamanian architect Ricardo J. Bermúdez on the preliminary works for Vista Hermosa in 1945.[22] The neighbourhood —also considered as a satellite city— boasted of winding internal roads, cul-de-sacs, and houses arranged at an angle on their lots, thereby enhancing the perception of isolated homes surrounded by gardens.[23]

The project was developed by the Banco de Urbanización y Rehabilitación [Urbanisation and Rehabilitation Bank, BUR], with the participation of architects Rosa Palacio, Guillermo de Roux, and Ricardo J. Bermúdez, among others. BUR produced low-cost housing, with funding provided by the Caja de Seguro Social [Social Security Agency].[24] In addition to working on Vista Hermosa, Solow conducted various urban and housing consultancies for BUR between 1945 and 1946.[25] Right after his engagement in Panama, Solow transitioned to working for APHA, where he co-authored *Planning the Neighborhood* a year after his consultancy on the Vista Hermosa project.[26] This is but one example of the inter-American trajectory of neighbourhood unit concepts.

As previously discussed, informal settlements in Latin America were given various names, and the same applies to neighbourhood units. Historical research conducted by Ana Patricia Montoya identifies them as 'población' and 'unidad vecinal' in Chile, 'centro urbano' and 'barrio' in Colombia, 'barrio' and 'unidad vecinal' in Peru, and 'caserío' in Puerto Rico, among other terms that reflect local characteristics.[27] In addition to tracing Perry's ideas since 1929, Montoya traced some Latin American proto-ideas, such as the 1911 Huemul I workers' neighbourhood in Chile, the 1924 Casas Económicas en Peñarol in Uruguay, and the 1926 Casa Colectiva del Parque Los Andes in Argentina.[28]

Huemul I, a neighbourhood in southern Santiago, included row-houses, two schools, a theatre, a library, and a central square.[fig.37] Chilean neighbourhood unit standards were subsequently observed in projects such as Germán Riesco of 1952, San Gregorio of 1958, and José María Caro of 1959.[figs.38-40] The latter comprised 12,000 dwellings, schools, parks, hospitals, and neighbourhood units that integrated different socio-economic groups. The Unidad Vecinal Portales, built in 1964, featured four-story buildings with single-family houses in the centre of the super-block

Union, 1949), 39-43.

22 Angel Rubio, *Esquema para un análisis de geografía urbana de la primitiva ciudad de Panamá. Panamá la vieja. 1519-1671*, Publicación No.12 (Panama City: Banco de Urbanización y Rehabilitación, 1947), 15.

23 Angel Rubio, *La Ciudad de Panamá* (Panama City: Autoridad del Canal, 1999), 99-100, 154-5.

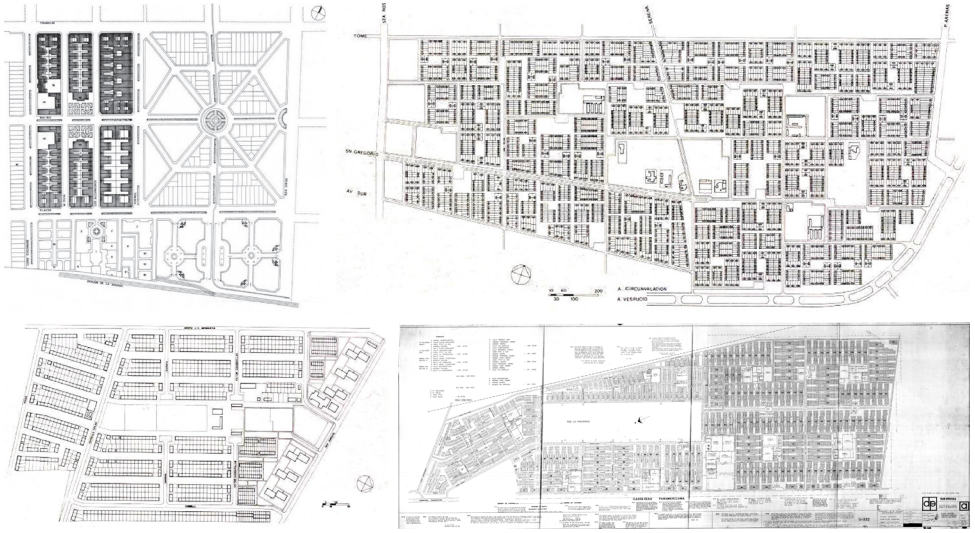
24 BUR was active between 1944 to 1953. 'The policy of the Banco has been a progressive one, making use of the best technical personnel available, including consultants in housing and planning from the United States' in Violich, *Low-Cost Housing*, 39.

25 Bonilla, 'San José, ville globale', 117.

26 Rubio, *La Ciudad de Panamá*, 168.

27 Montoya, 'Las Unidades Vecinales en América Latina', 18.

28 Montoya, 'Las Unidades Vecinales en América Latina', 21.



Figs.37-40 Huemul, San Gregorio, Germán Riesco, and José María Caro neighbourhoods in Santiago de Chile. Sources: Revista CA, vol.41, 26, 70, 74; SERVIU metropolitano, Chile.

and a facilities and commerce axis.[fig.41] In this regard, researcher Umberto Bonomo traced a rich trajectory of neighbourhood unit ideas from Perry to the Chilean neighbourhoods designed by CORVI and CORMU in the 1950s and 1960s.[29] He also mentioned the inter-American influence through the proposals of Peruvian architect Fernando Belaúnde, published in the *Arquitectura y Construcción* magazine in Chile in 1946, representing the earliest usage of the term 'neighbourhood unit' in the country.[30]

Montoya's extensive research on Latin American neighbourhood units includes an analysis of architectural journals and Pan-American architectural congresses of the 20th century. Ac-

29 Umberto Bonomo, 'Las dimensiones de la vivienda moderna: La Unidad Vecinal Portales y la producción de viviendas económicas en chile. 1948-1970' (Ph. D. thesis, Santiago, Pontificia Universidad Católica de Chile, 2009), 47-120.
30 Ibid., 106-7.

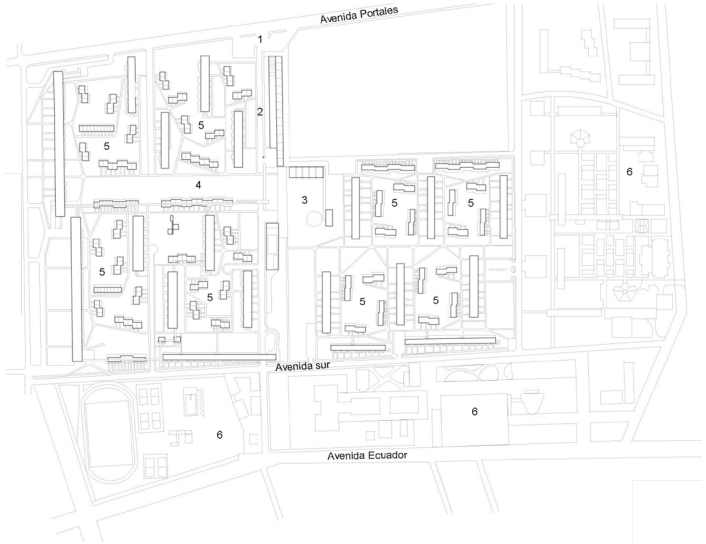


Fig.41 Unidad Vecinal Portales in Santiago de Chile. Source: Pérez Oyarzun, *Bresciani Valdés Castillo Huidobro*, 46.

cording to her findings, as early as the First Argentinean Congress of Housing in 1920, ideas for 'barrios-parque' [park-neighbourhoods] with amenities such as a school with a children's square, tennis courts, a clubhouse for cinema, concerts, and a library, among others, were presented.[31] She also investigates how regional reflections on the neighbourhood unit were interwoven with European and North American concepts, such as the English garden city, the German Siedlungen, the Austrian Höf, and the Green Belt in the US, as well as the discourses of the Modern Movement through the CIAMs.[32] Furthermore, Montoya highlights the significant influence of Perry's ideas, which notable Latin American exponents, including the Peruvian architect Fernando Belaúnde, have cited.

31 Montoya, 'Las Unidades Vecinales en América Latina', 19.
32 Ibid., 158-9.

Translations of neighbourhood units' ideas in Peruvian housing policies. Ciudad Ventanilla

Fernando Belaúnde Terry played a pivotal role in integrating the concept of neighbourhood units into the public policy of Peru through government plans and built projects, and disseminating these ideas through magazines and regional congresses.[33] Belaúnde was a Peruvian architect who graduated from the University of Texas in Austin, US, in 1935. He founded the magazine *El Arquitecto Peruano* upon his return to Peru. In addition to his academic, disseminator, and practitioner roles, Belaúnde had a significant political career, serving as deputy for Lima from 1945 to 1948 and as President of Peru from 1963 to 1968 until he was overthrown in a coup d'état. He was later re-elected as President and served from 1980 to 1985.

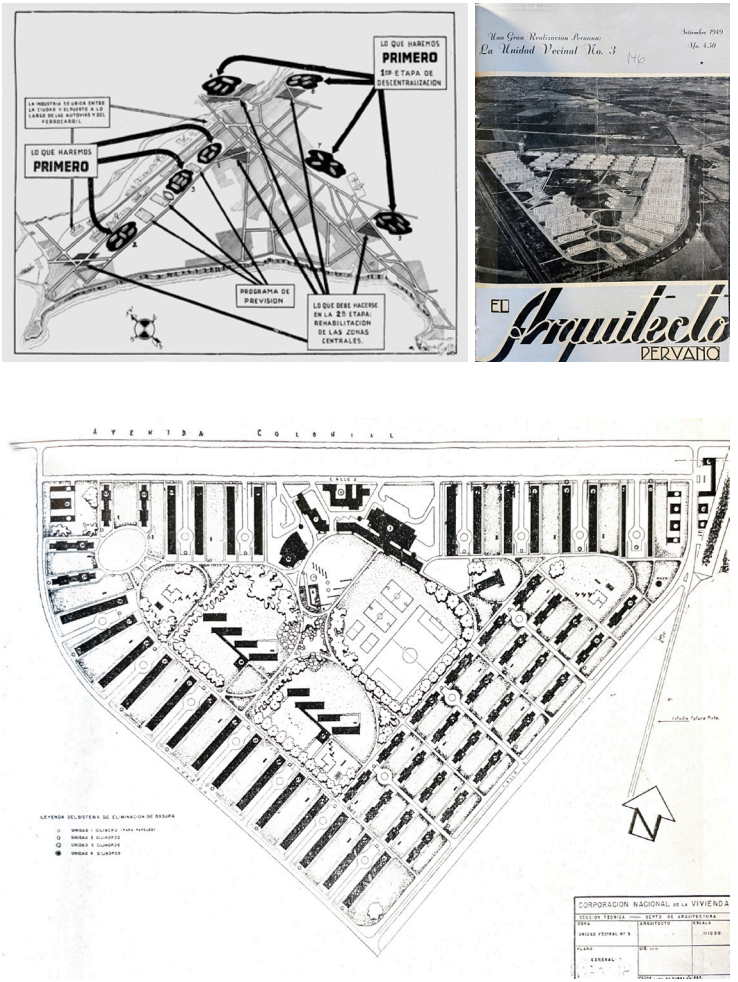
In 1944, Belaúnde published *El barrio-unidad: Instrumento de descentralización urbana* [the neighbourhood-unit: An instrument of urban decentralisation] in his magazine, drawing from academic work guided by Walter Gropius and Martin Wagner.[34] He used standards similar to those defined by Perry to describe the neighbourhood unit, based on 5,000 inhabitants with access to essential amenities.[35] Belaúnde further developed the concept through the Housing Plan for Lima in 1945, developed by the National Housing Corporation (CNV), with urban planners like Luis Dórich.[fig.42] This plan was also featured in *El Arquitecto Peruano*, where Belaúnde defined the neighbourhood unit as 'an urban cell, an element of decentralisation, and a dormitory city that provides the work centres with the necessary labour for production.'[36]

33 A trajectory of ideas for neighbourhood units in Peru has been extensively researched by Sharif S. Kahatt, *Utopías Construidas: Las Unidades Vecinales de Lima* (Lima: Pontificia Universidad Católica del Perú, Fondo Editorial, 2019),

34 Kahatt, *Utopías Construidas*, 244-8; Montoya, 'Las Unidades Vecinales en América Latina', 171.

35 Kahatt, *Utopías Construidas*, 246.

36 Bonomo, 'Las dimensiones de la vivienda moderna', 107.



Figs.42-4 Housing Plan for Lima; Neighbourhood Unit N.3. Sources: (top left) Housing plan reproduced in Kahatt, *Utopías Construidas*, 104; (top right and bottom) Revista El Arquitecto Peruano September, 1949.

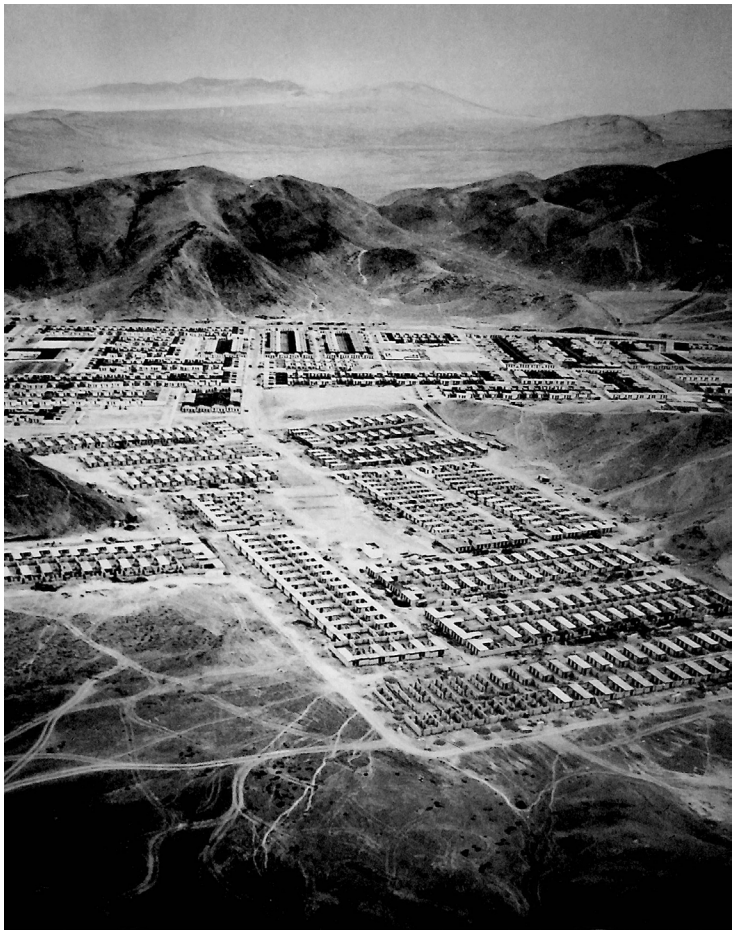


Fig.45 Ciudad Ventanilla, near Lima, Peru. Source: IDB, *El BID y la vivienda*, 21

Unlike Perry, Belaúnde mainly emphasized locating the neighbourhood unit on inexpensive land on the periphery. The Housing Plan consisted of seven neighbourhood units for 1,000 families, approximately 5,000 people, distributed in the industrial periphery of Lima, with Neighbourhood Unit 3 serving as the flagship complex.[37] figs.43-4

Following Belaúnde's lead, there were further attempts to popularize the neighbourhood unit concept throughout the region. At the VI Pan-American Congress of Architecture held in Lima in 1947, it was proposed that 'all countries of America should formulate regulatory plans for their cities, establishing neighbourhood units as basic elements for their structuring.' Additionally, they advocated for the integration of different socio-economic strata within these neighbourhoods.[38]

Then, in the early 1960s, the development of satellite cities and neighbourhood units in Peru received support from SPTF funds and the Alliance for Progress.[39] The newly created National Housing Institute (INV) proposed a ten-year programme (1962-72) to build 35,000 houses within the first two years, including satellite cities such as Ventanilla and San Juan.[fig.45] At this point, the proposed finished houses by previous Belaúnde's neighbourhoods were complemented or substituted by aided self-help.[40] Luis Marcial led the new housing plan,[41] a young Peruvian architect who had studied at CINVA in 1955 and had previously participated in the preliminary project for the satellite city of Hatillo in Costa Rica in 1956 alongside Anatole Solow[42]. John Turner assisted Marcial in implementing self-help strategies,[43] but

37 Kahatt, *Utopías Construidas*, 99-108; Montoya, 'Las Unidades Vecinales en América Latina', 112.
38 Montoya, 'Las Unidades Vecinales en América Latina', 26-7.
39 Koth, Dietz, and Silva, Housing in Latin America, 122; US Senate, Study of International Housing, 408-9.
40 Kahatt, *Utopías Construidas*, 168.
41 Ibid., 184.
42 Bonilla, 'San José, ville globale', 239, 480.
43 Gyger, 'The Informal as a Project', 197-8; Turner, John F. C. *II Curso superior de vivienda: La Autocon-*

he stated that only a small portion of the national programme was constructed that way.[44] Marcial directed various neighbourhood unit projects in Peru, including Ventanilla, until his sudden death in 1962 in a plane crash.[45]

Ciudad Satélite de Ventanilla aimed to accommodate 80,000 inhabitants in 20,000 single-family houses distributed in ten neighbourhoods located 25 kilometres northwest of Lima.[46] While IDB funds supported a small portion of aided self-help housing, most of the housing construction was subcontracted.[47] The beneficiaries of this project came from various socio-economic backgrounds, mainly low-income people, including, for instance, navy workers. Despite initial plans for industrial access, the industries did not materialize, leading Ventanilla to develop as a suburban neighbourhood reliant on Lima.[48]

In the early 1960s, the construction of several satellite cities across Latin America, including Ventanilla, Aliança and Progresso, reflected an inter-American trajectory of neighbourhood design ideas. These neighbourhoods, characterized by single-family houses, were rapidly replicated in various cities with the support of the IDB and the USAID as part of the Alliance for Progress. The availability of funds like the SPTF supported numerous locally developed projects in a short period as long as they met the requirements reviewed in the previous chapter. As illustrated below in Costa Rica, the origin of these funds and the North-South collaboration they involved were not immune to the geopolitical tensions of the Cold War.

strucción. Bogotá: CINVA, 1967, 5-6.

44 John F. C. Turner and Robert Fichter, *Freedom to Build: Dweller Control of the Housing Process* (New York: Macmillan, 1972), 139-40.

45 Kahatt, *Utopías Construidas*, 370; Gyger, 'The Informal as a Project',198; Turner and Fichter, *Freedom to Build*, 139.

46 Ray Bromley, 'Peru 1957–1977: How Time and Place Influenced John Turner's Ideas on Housing Policy', *Habitat International* 27, no. 2 (June 2003), 284.

47 Koth, Dietz, and Silva, *Housing in Latin America*, 124.

48 Gyger, 'The Informal as a Project',148; Kahatt, *Utopías Construidas*, 116.

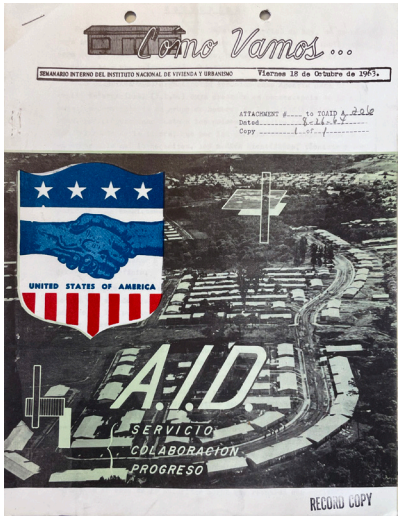


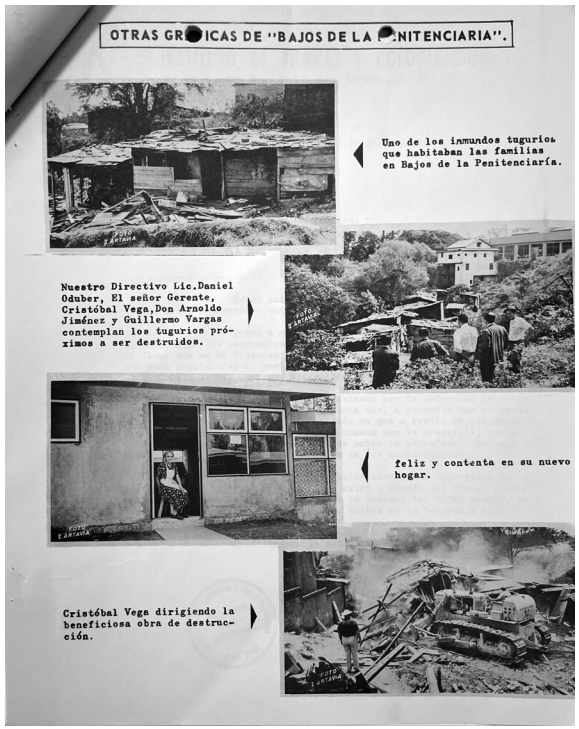
Fig.46 Costa Rica INVU internal newsletter *Cómo Vamos...* 18 October 1963. Source: Box 147, RG286, Closed Project Loan Files, 1962–1972, NARA

Foreign and local encounters in Costa Rica. Ciudad Hatillo

In July 1963, the Costa Rican government and USAID signed a $2 million loan agreement to construct low-cost housing, later called the Slum Clearance Program.[49] The National Institute of Housing and Urbanism (INVU), established in 1954, managed the funds. INVU published a weekly internal document called 'Cómo Vamos...' [How are we doing...] for its officials.[50] The 18 October 1963 issue featured an aerial photograph of a low-cost housing neighbourhood with the USAID shield and the words 'service col-

49 INVU, 'AID Slum Clearance Program', Final report (San José: Instituto Nacional de Vivienda y Urbanismo, 31 March 1969), Folder Costa Rica: Project 515-L-006 Slum Replacement Housing, Box 146, RG286, Closed Project Loan Files, 1962–1972, US National Archives and Records Administration, College Park, MD (hereafter designated NARA).

50 INVU, 'AID Slum Clearance Program', Monthly report (San José: Instituto Nacional de Vivienda y Urbanismo, 28 July 1964), 9, Folder Costa Rica: Project 515-L-006 Slum Replacement Housing, Box 147, RG286, Closed Project Loan Files, 1962–1972, NARA.



Figs.47-8 Slum Clearence Program in INVU internal newsletter 'Cómo Vamos...', Costa Rica. Source: Box 147, RG286, Closed Project Loan Files, 1962–1972, NARA.

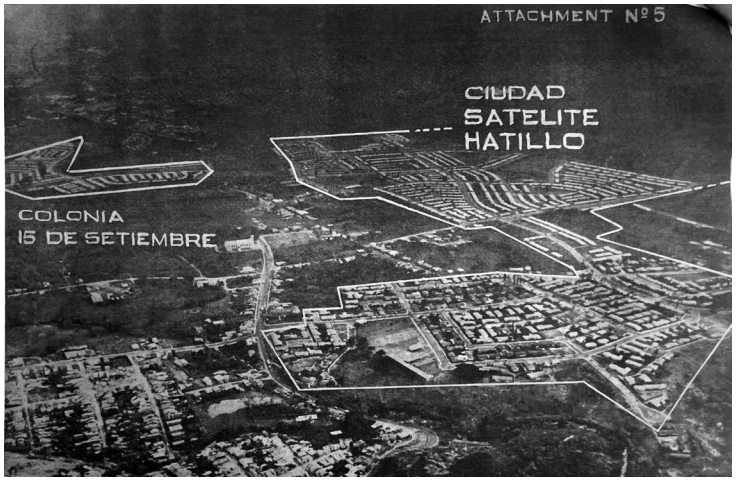
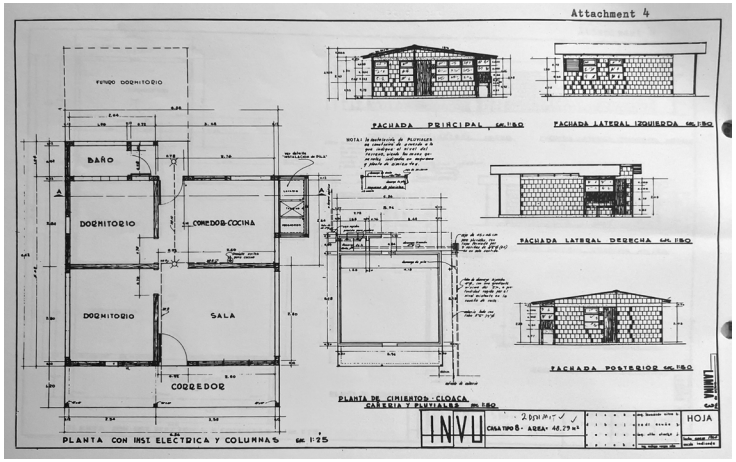


Fig.49 Colonia 15 de Setiembre and Ciudad Satélite Hatillo, Costa Rica, 1969. Source: Box 146, RG286, Closed Project Loan Files, 1962–1972, NARA

laboration progress'.[51] fig.46 The editorial acknowledges US support in enabling nations to harness their human and natural resources through scientific, technical, and economic means. However, it recognizes that this ideal was 'met with opposition and enmity from other sectors of men who selfishly base their progress on the ruthless exploitation of the ignorance and incapacity of those peoples', reflecting the Cold War strains. The editorial acknowledged the conflict between two 'antagonistic and incompatible forms of thought' during this historical period.[52]

Under the Slum Clearance Program, USAID supported the construction of nearly 2,000 houses, of which 76% were in San José.[53] The programme aimed to relocate people from informal housing to new neighbourhoods in the city's outskirts and other urban areas, as slums were demolished for urban renewal projects. figs.47-8 Colonia

51 INVU, 'Cómo vamos...' (Instituto Nacional de Vivienda y Urbanismo, 18 October 1963), Box 147, RG286, Closed Project Loan Files, 1962–1972, NARA.
52 INVU, 'Cómo vamos', editorial. Translated by author.
53 Ibid., 5.

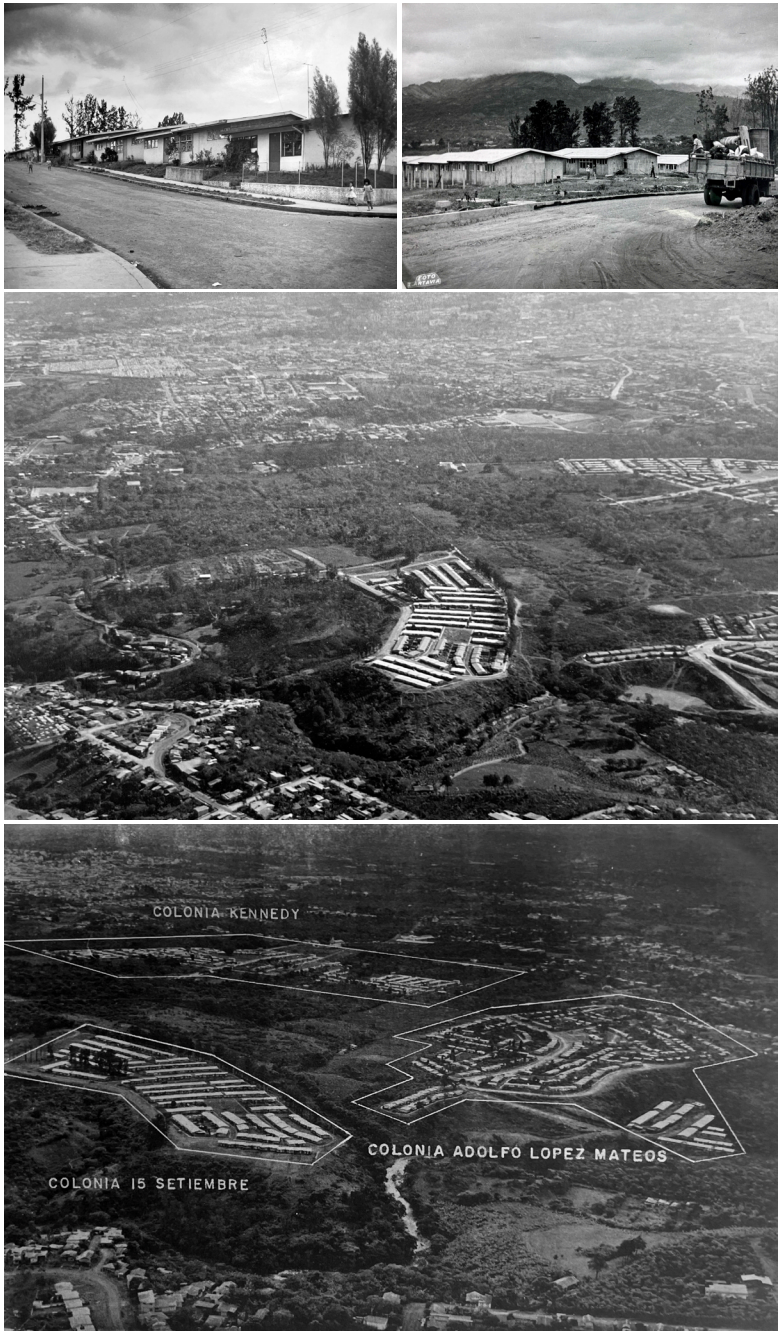


Figs.50-54 (top) INVU housing design n.8. Source: Box 146, RG286, Closed Project Loan Files, 1962–1972, NARA
Opposite page (top) Colonia 15 de Setiembre built project and a family from Callejón de la Puñalada arriving to Setiembre neighbourhood. (middle) Aerial view of 15 de Setiembre. (bottom) Neighbourhood projects near San José de Costa Rica, 1969. Sources: Box 2, RG306-AFP, Photographs Relating to the Alliance for Progress, NARA; Boxes 146 and 147, RG286, Closed Project Loan Files, 1962–1972, NARA

15 de Setiembre and Ciudad Hatillo were part of this programme receiving USAID funds.[fig.49] They offered houses ranging from 42 to 51 square metres, with two or three bedrooms, a bathroom, a living-dining room, and a kitchen.[54] [figs.50-1] The houses financed by USAID were built by construction companies rather than through aided self-help.[55] While intended for owner-occupancy, a 1968 audit revealed that some houses were being rented out, which violated the agreement with USAID.[56]

Colonia 15 de Setiembre was established circa 1962. The final neighbourhood was completed approximately five years later, consisting of 548 houses, parks, a school, commercial spaces, and a community centre in its design.[57] The families who relocated to this neighbourhood originated from various informal settlements, including Callejón de la Puñalada [Stabbing Alley].[fig.52] Situated in the southern area of San José, this new neighbourhood became a

54 Ibid., 2.
55 Ibid., 3.
56 Office of the area controller, 'Results of Examination of AID 515-L-006', Audit report (Guatemala: USAID, 16 August 1968), 5, Folder Costa Rica: Project 515-L-006 Slum Replacement Housing, Box 147, RG286, Closed Project Loan Files, 1962–1972, NARA.
57 Mónica Cháves et al., 'La producción del espacio público en proyectos habitacionales en el canton de San José: Instituto Nacional de Vivienda y Urbanismo (1954-1986)' (Bachelor's diss., San José, Universidad de Costa Rica, 2019), 129, 142.



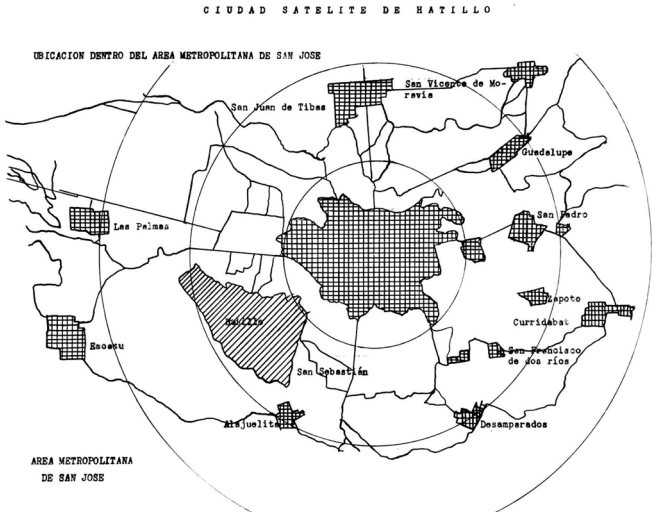


Fig.55 Ciudad Hatillo location in San José de Costa Rica. Source: Morales, 'El Financiamiento', 7

hub of urban expansion for the less affluent population, alongside Hatillo and other contemporary urban developments.[figs.53-4]

In the mid-1950s, Ciudad Satélite de Hatillo was situated two kilometres south of downtown San José and has since been integrated into the city's urban fabric.[fig.55] The original project aimed to provide 7,000 houses for 38,000 inhabitants, distributed among '7 neighbourhood units, with an average of about 5,000 inhabitants each, with their school, community centre, commercial premises, parks, and playgrounds. In addition, the City will have two secondary civic-commercial centres, a main core for central commerce and offices, two secondary schools, and a vocational school.'[58] The plan diverged from Perry's ideas in that it allocated twenty per cent of the area for light industries. This information corresponds to a preliminary document prepared by Efraim Morales for a seminar on housing finance and public services to be held at CINVA.

The construction of Hatillo's first neighbourhood unit began in 1955 and was later expanded by INVU to become the initial phase of a satellite city.[59] The 1956 Hatillo preliminary plan was signed by Anatole Solow, Eduardo Jenkins, and Luis Marcial, in that order.[60] Its winding internal streets, public spaces, community facilities, and wider surrounding avenues are evocative of Perry's ideas, albeit with the addition of the southern industrial sector. Hatillo underwent phased development and design modifications. A 1962 draft design of Hatillo neighbourhood unit 3 is an example of the sector supported by USAID, with urban design adhering to the concept of structural roads with higher traffic on the perimeter, while the school, commerce, and sports court are located at the centre.[fig.57]

Historian Bonilla traced the trajectory of design ideas that shaped Ciudad Satélite de Hatillo, proposing it as a regional planning project in which global and local perspectives converged.[61] He followed the path from Solow's translations of Perry's work to Central American discussions on community facilities.

Regarding the three signatories of the 1956 draft plan mentioned earlier, Rodrigo Carazo, on behalf of INVU, invited Solow to serve as Hatillo's advisor in 1956, due to his familiarity with the country, based on a technical visit he made in 1948, and his experience in housing issues, in connection with CINVA.[62] According to Bonilla, Solow would have headed the Ciudad Hatillo Central Planning Committee, from which he could have implemented the ideas presented in his publication *Planning the Neighbourhood*.[63]

58 Efraim Morales, 'El Financiamiento de la adquisición de terrenos para el Instituto de Vivienda y Urbanismo de Costa Rica' (CINVA, 1959), 8, Centro de Documentación, Ministry of Housing and Urbanism, Chile (hereafter designated CEDOC).

59 Alejandro Bonilla, 'La circulación y apropiación del principio de la planificación integral en Costa Rica (1949-1980)', *REVISTARQUIS* 11, no. 2 (25 June 2022), 118.

60 A preliminary draft of Ciudad Hatillo by Anatole Solow, Eduardo Jenkins and Luis Marcial (September 1956) can be found in INVU, 'Proyecto de ley para reservas de terrenos en Hatillo'. (San José: El Instituto, 1957), reproduced in Bonilla, 'San José, ville globale', 482.

61 Bonilla, 'San José, ville globale'; Bonilla, 'La circulación'; Alejandro Bonilla, 'Circulación de saberes del urbanismo y redes transnacionales del INVU, 1954-1970', *Revista Reflexiones* 97, no. 2 (December 2018), 87–106.

62 Bonilla, 'San José, ville globale', 235-6; 365-9.

63 Ibid., 480.

Figs.56 Ciudad Hatillo, 1969. Source: Box 146, RG286, Closed Project Loan Files, 1962–1972, NARA

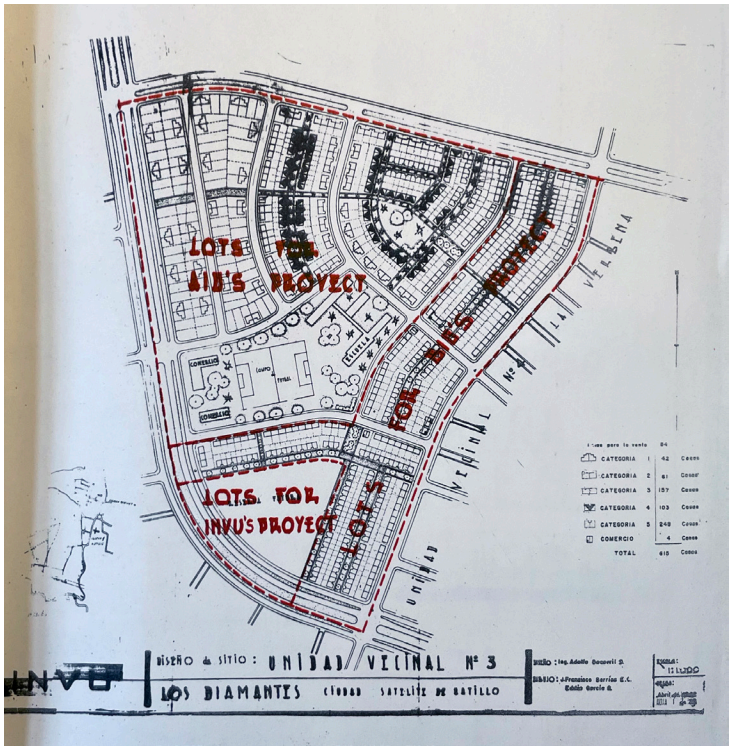


Fig.57 Neighbourhood Unit N.3 in Ciudad Hatillo. USAID and IDB housing projects location. Source: Box 146, RG286, Closed Project Loan Files, 1962–1972, NARA

The second signature on the 1956 draft plan belongs to Eduardo Jenkins, a Costa Rican engineer and planner.[64] Bonilla indicates that Jenkins referenced reports on Ciudad Techo from CINVA in his presentations in 1957, suggesting that they might have served as background material for the Hatillo design.[65] One of these reports was actually written by Peruvian architect Carlos Williams in 1954,[66] and another is a comprehensive 1954 CINVA final year paper by Brazilian engineer José Eduardo Campos de Almeida, titled *Los servicios comunales en la unidad vecinal* [Community services in the neighbourhood unit][67]. Jenkins extensively compared in *Frequency of use of communal facilities* the amounts of facilities per neighbourhood unit or satellite city in San José and its surroundings, figures proposed by CINVA for

64 Ibid., 251-2.
65 Ibid., 342;474-87.
66 This report could be: Carlos Williams, Proyecto Techo. Informe preliminar sobre Servicios Comunales (CINVA, 1954).
67 This report was included in the bibliography of CINVA's basic course on social housing. José Eduardo Campos de Almeida, 'Los Servicios Comunales en La Unidad Vecinal' (Final course paper, Bogotá, CINVA, 1954), Box 151, Collection Centro Interamericano de la Vivienda - Universidad Nacional de Colombia (hereafter designated CINVA)

Sogamoso and Ciudad Techo, and data from Campos' study, all of which were related to his Hatillo proposal.[68]

The third signature is Luis Marcial, who was also involved in the referred neighbourhood unit projects in Peru during the 1960s. He studied at CINVA in 1955, where he designed neighbourhood units, as reviewed below. The trajectories intertwine, with CINVA serving as a inter-American housing platform again, and Ciudad Techo acting as one of the satellite cities with neighbourhood units in which this institution participated.

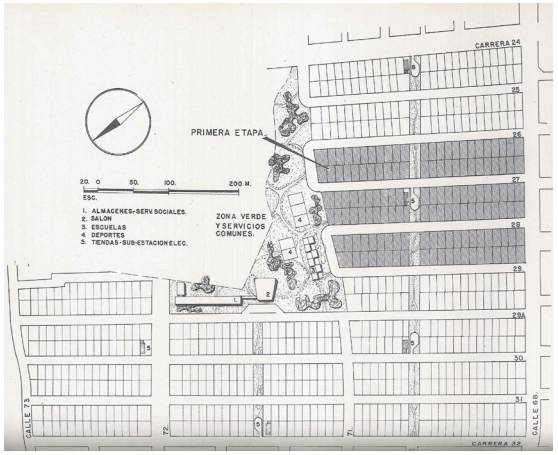
Research and practice on neighbourhood units at CINVA Ciudad Techo

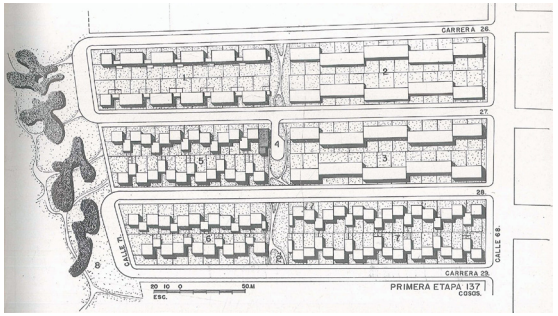
This section delves into CINVA's role as a hub for architectural, urban design, and regional planning ideas centred around satellite cities and the use of neighbourhood units as fundamental components of housing developments. As previously discussed, Ciudad Techo, initiated in 1961, stood out as one of the flagship projects of the Alliance for Progress.

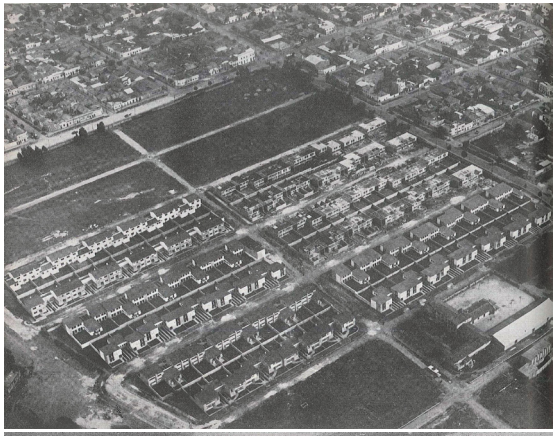
Architectural historian Samuel Jaimes Botía noted that already in 1942, Colombia passed legislation allowing municipalities to build 'barrios populares modelo' [model people's neighbourhoods] featuring housing and community services, such as schools, nurseries, sports fields, cultural centres, restaurants, and market squares, among other facilities.[69] Regarding the implementation of neighbourhood units, Jaimes suggests that Perry's ideas were introduced in the Colombian context, among others, through the studies of Josep Lluis Sert who worked in Bogotá alongside local professionals. One of them, Jorge Gaitán, had already been translating modern movement ideas to the local context and actively participated in the CIAMs.[70] Researcher Maarten Goossens has studied Gaitán's work, demonstrating how he introduced the neighbourhood units to the ICT as early as 1948.[71]

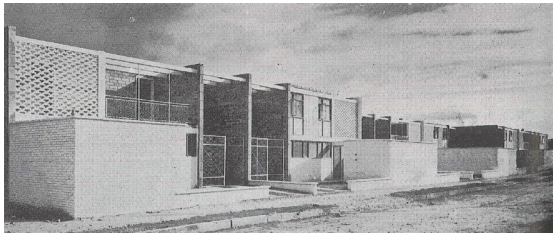
The ICT built three neighbourhood units in Bogotá between 1949 and 1959: Los Alcázares, Muzú, and Quiroga. Gaitán participated in these projects through ICT, and Sert, Paul Lester Wiener, and Le Corbusier in the third, with CINVA also participating in its construction. According to a 1962 CINVA report, these complexes were intended for low-income populations. However, they predominantly attracted middle and upper-middle socio-economic strata due to various factors.[72] Los Alcázares neighbourhood comprised approximately 700 single-family dwellings distributed in elongated blocks without winding streets. The original plan had a centre with community services, stores, schools, sports fields, shops, and parks.[73] fig.58-61 The CINVA report indicates that the project initially targeted upper-middle-class families to minimize financial risk. While a small portion of the project was sold to middle-income families, it faced opposition from residents, leading to the subsequent phase being offered to upper-middle-income families.[74] The Muzú neighbourhood unit began construction in 1949 with approximately 1,000 dwellings, plus 126 middle-class dwellings added in 1956.[75] fig.62-4 The urban design consists of two-story single-family houses with courtyards arranged in a large park area with a winding network of pedestrian walkways. The area was connected to the city by a single, dead-end vehicular street, and the centre was intended to feature a sports field, church, shops, and a school.[76]

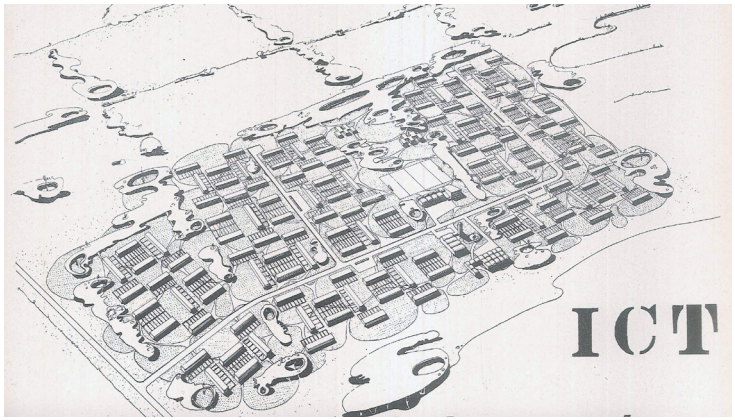
68 Eduardo Jenkins, 'Frecuencia de uso de facilidades comunales' (Meeting on housing issues, building industries and construction materials in Central America and Panama, CEPAL, 1957).
69 Samuel Jaimes Botía, 'La vivienda en Bucaramanga 1948-1962: Una crítica a la modernidad en Colombia' (Ph.D. thesis, Barcelona, Universidad Politécnica de Cataluña, 2020), 212-3.
70 Jaimes Botía, 'La vivienda en Bucaramanga', 200-17; Sanchez Holguin, 'Colombia's History', 176.
71 Maarten Goossens, 'Jorge Gaitán Cortés y la introducción del urbanismo moderno en Colombia', *Dearq*, no. 14 (1 July 2014), 210–23.
72 CINVA, *Instituciones de vivienda en Bogotá: Desarrollo y administración*, Administración (Bogotá: CINVA, 1962), 5-6.
73 'El Nuevo Barrio Los Alcázares'. *Revista Proa* 28 (October 1949): 16–34.
74 CINVA, *Instituciones de vivienda*, 6.
75 Ibid., 6.
76 'Unidad vecinal de Muzú. Bogotá'. *Revista Proa* 30 (December 1949): 16–21; Goossens analysed this housing project in the context of Jorge Gaitán's tenure at the ICT: Goossens, 'Jorge Gaitán'; Fabio Forero in his research on Muzú highlights the collaboration of Alvaro Ortega and the influence that Walter Gropius had on his work: Fabio Enrique Forero Suárez 'La 'informalización' del hábitat moderno en Bogotá: Identidades en el habitar popular, transformaciones de la vivienda social y estudio de caso en las primeras unidades vecinales de

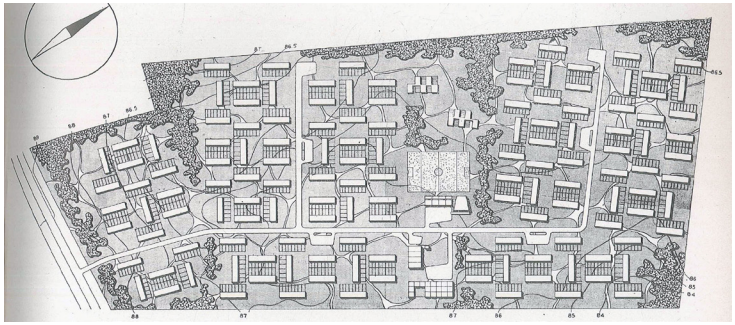


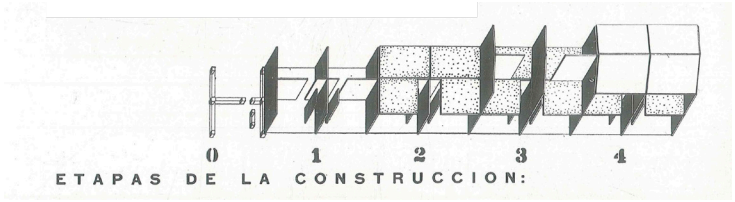












Figs.58-64 (previous page) Los Alcázares neighbourhood unit. Source: *Revista Proa* 28. (above) Muzú neighbourhood unit. Sources: *Revista Proa* 28 and 44.

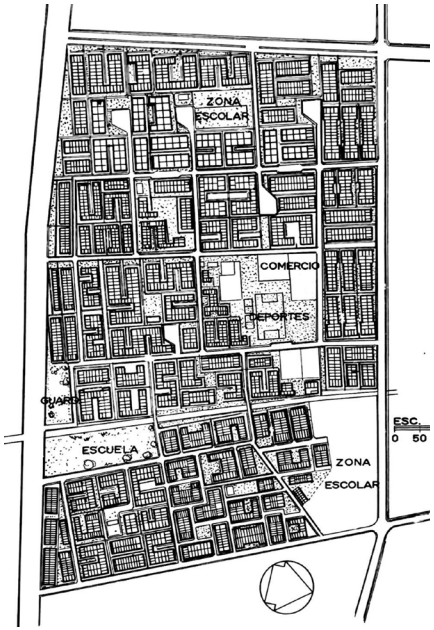


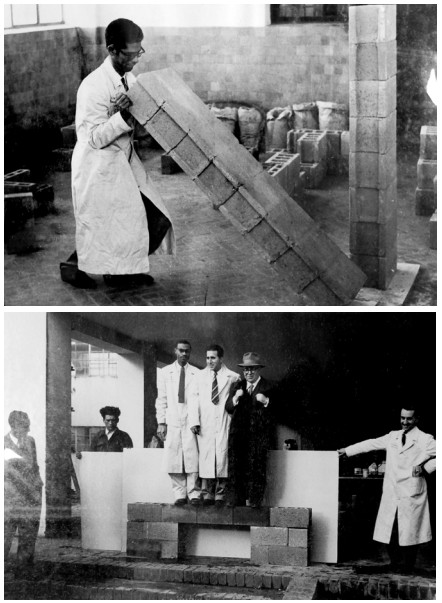
Fig.65 Quiroga neighbourhood. Source: CINVA, *Monografías*, 10.

The Quiroga neighbourhood unit, consisting of approximately 4,000 dwellings, underwent eight stages of construction between 1951 and 1955.[fig.65] Initially, the project aimed to serve low-income families, but the second stage was sold to middle-income families due to payment issues.[77] The design was a joint effort between the OPRB and the ICT with Sert, Wiener, and Le Corbusier serving as consultants.[78] Sert and Wiener, active in Colombian projects from 1948 to 1953, employed the neighbourhood unit as a fundamental design element in their urban plans for Latin America during the 1940s and 1950s. These plans were developed through their office, Town Planning Associates, drawing on studies published by Sert in *Can Our Cities Survive?* in 1942. In Bogotá, Sert and Wiener collaborated with Le Corbusier on a Regulatory Plan that was never executed.

Muzú y Quiroga / Instituto de Crédito territorial ICT' (Ph.D. Dissertation, Barcelona, Universitat Internacional de Catalunya, 2008), 503-97.

77 CINVA, *Instituciones de Vivienda*, 6; René Eyheralde, 'Estudio Sobre Materiales y Métodos de Construcción' (CINVA, 1954), 19-20, Box 167, CINVA.

78 Doris Tarchópulos, 'Las Huellas del plan para Bogotá de Le Corbusier, Sert y Wiener' (Ph.D. thesis, Barcelona, Universidad Politécnica de Cataluña, 2010), 155, 228; Eyheralde, 'Estudio sobre Materiales', 17-18; A research on Quiroga's first stage and the role of Sert, Wiener and Le Corbusier in Forero Suárez, 'La 'informalización''. 598-646.



Figs.66-7 Ongoing CINVA research on construction processes for the Quiroga neighbourhood project. Source: Eyheralde, 'Estudio sobre materiales', plates 191 and 237, Box 167, CINVA.

The construction of Quiroga was carried out through ICT and was closely followed by one of the first courses taught at CINVA in 1952. Architect-engineer Howard T. Fisher, from Chicago, was in Colombia as a consultant sent by the UN to ICT and a visitor at CINVA.[79] René Eyheralde, the mentioned Chilean architect and one of the first CINVA students, later became a professor at the institution and continued to develop Fischer's research method in what they called Progressive Development in Housing Design.[80] [figs.66-7] One noteworthy feature of Quiroga's design, photographed by Leonard Currie —CINVA's director at the time— was the use of vaulted ceilings resulting from collaboration with a private company.[figs.68-72] Quiroga was part of another CINVA course, in 1956, which sought to generate a methodology for evaluating neighbourhoods of this type in Latin America. The course bibliography included in the design standards section the report by Campos de Almeida and the book by Solow and Copperman for APHA.[81] Besides Quiroga, neigh-

79 Eyheralde, 'Estudio sobre Materiales', 1-16; Jaimes Botía, 'La vivienda en Bucaramanga', 160,190.

80 René Eyheralde, *El concepto de Desarrollo Progresivo en el Diseño de la Vivienda*, Diseño y Construcción (Bogotá: CINVA, 1963).

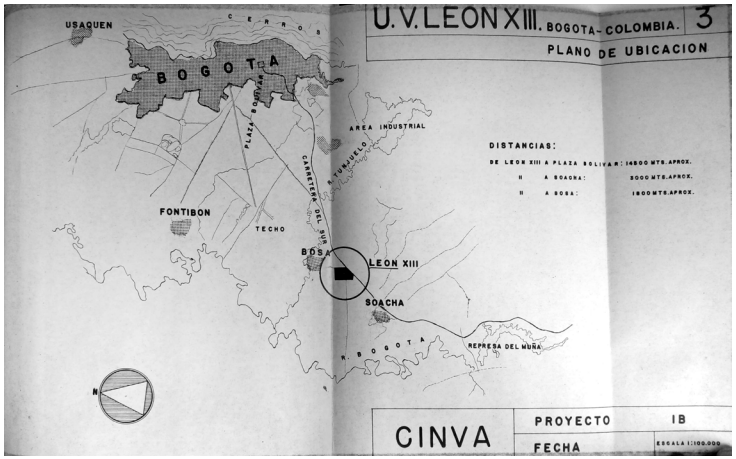
81 CINVA, *Ensayo en evaluación de barrios: Quiroga 1956*, Trabajos de clase n.3 (Bogotá: CINVA, 1957), 77, Box 62, CINVA.

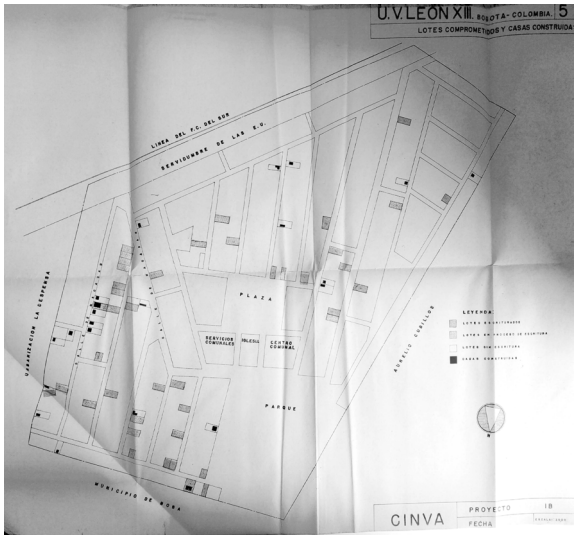
Figs.68-72 Leonard Curry in a house in Quiroga. Construction of Quiroga; Quiroga neighbourhood. Sources: (this page) Box 1 Folder 16, VTECH. (opposite page) Currie, Leonard J. (Leonard James), 1913-1996 (Photographer), "Unidad Vecinal (Community Housing Project) Quiroga, Bogotá," Southwest Virginia Digital Archive, accessed November 17, 2023, https://di.lib.vt.edu/items/show/484.

bourhood unit proposals such as León XIII and Torcoroma were also reviewed in the early years of CINVA's operation. Torcoroma, developed in 1953 in the south of Bogotá, served also to experiment on housing prototype using Progressive Development in Housing Design under the research project led by Eyheralde.[82]

The preliminary design of the León XIII neighbourhood unit was developed in 1952 under the guidance of Panamanian architect Guillermo de Roux, with Eyheralde as a student.[83] De Roux had previously worked at BUR, where the Vista Hermosa neighbourhood unit was developed since 1945 with the mentioned advice of Solow. Currie was familiar with this work and had recommended a paper prepared by De Roux and Bermúdez in 1946 on housing in Panama for implementation in Costa Rica.[84] The ideas presented in this section converge in León XIII: 'this neighbourhood unit makes it possible to organise living areas by linking them to the school (...) and to plan the community facilities while giving great flexibility to the local street layout'.[85] The project consisted of 1,803

82 René Eyheralde, 'Proyecto casa experimental I.C.T.', Progress report (Bogotá: CINVA, 1954), 1-2, Box 156, CINVA.
83 CINVA, 'Unidad Vecinal Leon XIII. Anteproyecto', Preliminary report (Bogotá: CINVA, 1952), ii, Box 43, CINVA.
84 Rafaela Espino and Leonard Currie, *La vivienda en Costa Rica. Housing in Costa Rica* (Cambridge: The architects collaborative, 1951), 65, Box 11, Leonard J. Currie papers, Ms-2007-028, Special Collections and University Archives, Virginia Tech (hereafter designated VTECH).
85 CINVA, 'UV León XIII', 18.



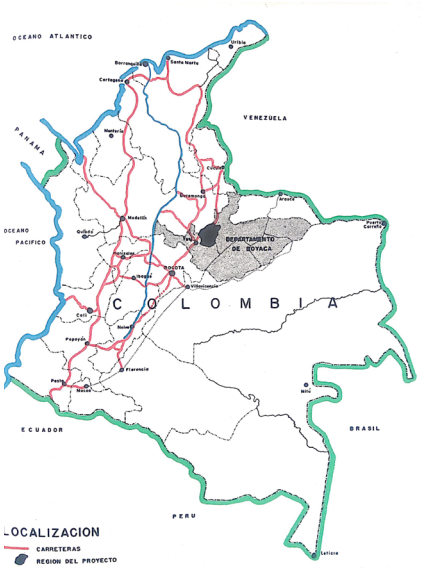


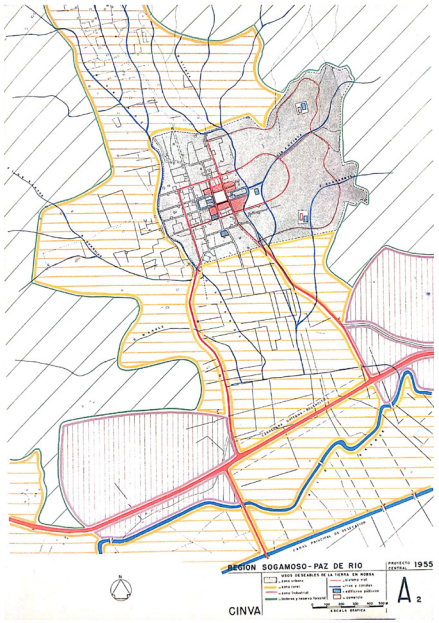
Figs.73-4 Leon XIII neighbourhood project location (above) and preliminary urban design (opposite page). Source: CINVA, 'UV León XIII', Box 43, CINVA.

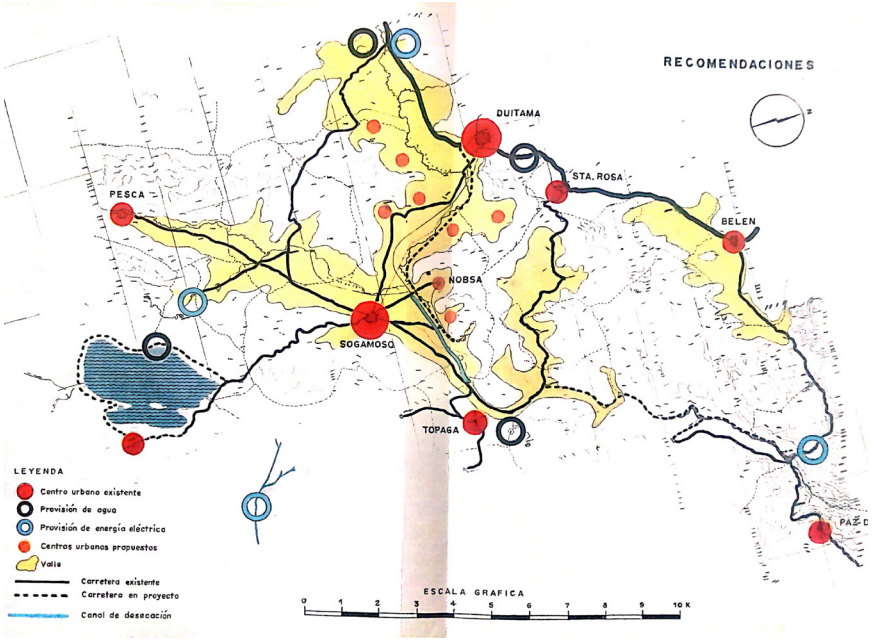
sites distributed in three units, each accommodating 4,000 to 4,500 inhabitants.[86] These neighbourhoods comprised fully completed single-family dwellings that could be expanded at low cost.[87] The project was situated to the south-west of Bogotá, at Soacha district, close to rising employment opportunities.[fig.73] The urban design was somewhat rigid, with community services and a square in the centre, next to a park to the north, and rectangular blocks arranged around them. The plots were 18 to 20 metres deep with 6 to 9 metres of frontage, reducing urbanization costs.[88] [fig.74] Ideas on circulation, separating cars from pedestrians, were also integrated.

In November 1954, Brazilian student José Eduardo Campos de Almeida incorporated CINVA's experience with neighbourhood units into his final coursework. *Los servicios comunales en la Unidad Vecinal* included data on proposals by Carlos Williams, such as León XIII, Torcorama, and Ciudad Techo, as well as other sources from Latin American, North American, and European authors.[89] Almeida compared quantitative data, beginning with primary schools and references to Perry's ideas, before reviewing the health, civic centre, cultural, and commercial uses. He concluded with definitions of the neighbourhood unit, questioning Perry's definition of its size in Latin America but highlighting how the Ciudad Techo study coincided with the proposals of the North American planner.[90] He emphasized the need to modify neighbourhood units and replace the idea of isolating them from industry with having them in slight proportion to prevent them from becoming dormitory cities.[91] Additionally, he provided definitions for dormitory cities, garden cities, and satellite cities, viewing the latter as growth focuses for consolidated urban centres rather than wholly autonomous and isolated cities.[92]

86 Ibid., 19.
87 Ibid., 21.
88 Ibid., 33.
89 Campos de Almeida, 'Los Servicios Comunales'.
90 Ibid., 84.
91 Ibid., 86.
92 Ibid., 88.







Figs.75-7 Location and intervention areas of the CINVA Sogamoso project, 1955. Source: CINVA, Proyecto Sogamoso, Box 47, CINVA.

Campos' report is listed in the bibliographies cited in the Sogamoso project, which marked CINVA's first attempt at regional planning in 1955 during Currie's tenure.[93] Architect César Garcés coordinated the project, whom Currie knew from his work in Costa Rica and who had participated in the early stages of Hatillo neighbourhood unit.[94] The exercise involved 24 students, along with engineers David Vega-Christie and Raúl Ramírez, and architects Ernesto Vautier and Conrado Sonderéguer, among others, who participated as professors. Social worker Josephina Albano and sociologist Falls Borda also contributed as consultants.[95]

93 While Leonard Currie does not appear in the publication's credits, it is part of the projects detailed on his CV as part of his years at CINVA. Leonard Currie, 'Curriculum Vitae', n.d., Folder Series II: Personal papers, Box 10, VTECH.

94 Espino and Currie, *Housing in Costa Rica*., iv. Bonilla, 'Circulación de saberes', 100.

95 Servicios de Intercambio Científico CINVA, *Proyecto Sogamoso - Paz de Río: Ensayo de una metodología*, Trabajos de Clase n.1 (Bogotá: CINVA, 1956), 9-11, Box 47, CINVA.

Mentioned Peruvian Luis Marcial, as a student, was part of the housing team and oversaw site design.[96]

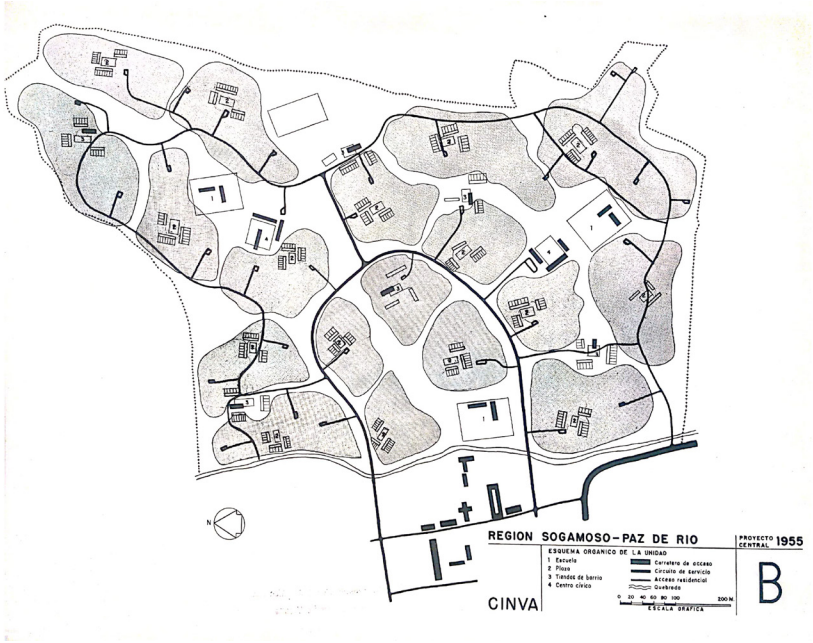
The Sogamoso project aimed to address challenges arising from establishing a steel plant in the Boyacá region of Colombia, which was previously dedicated to agriculture and livestock.[fig.75] The project generated issues such as worker migration, housing shortages, land speculation, lack of zoning, and environmental problems. To tackle these issues, CINVA conducted a study proposing a regional plan that considered land use, transport systems, water and electricity supply, agricultural water management, and provision of public services.[fig.77] The plan aimed to delimit industrial areas, provide education and health services and ensure housing

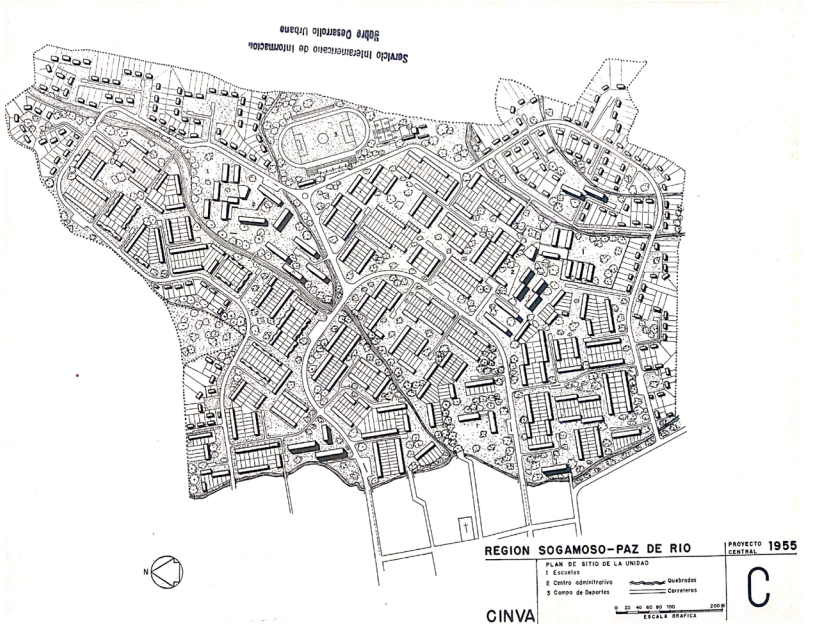
96 CINVA, *Proyecto Sogamoso*, 10.

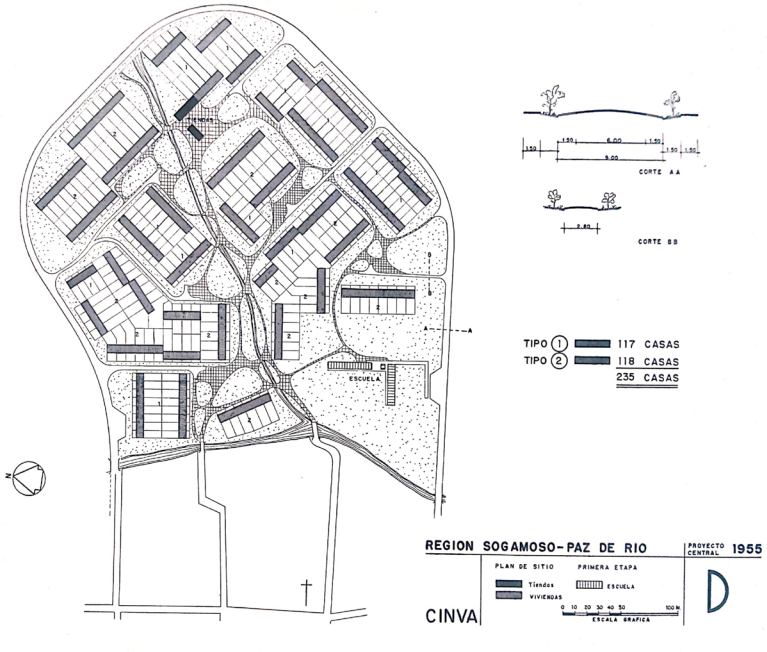
availability.[97] The CINVA study found that 50% of the urban population lacked public services, and 40% of the workers were unable to rent a room, compelling them to live in rural areas and spend up to four hours a day in transport.

As part of the general plan for Sogamoso, CINVA developed a housing proposal for the Nobsa area.[fig.76] The project introduced three neighbourhood units, each with a primary school, commercial and community sector at their centre. Each neighbourhood consisted of four or five groups with 150 to 200 houses, accommodating between 4,000 and 5,000 residents per unit. The study emphasized the importance of squares, which were proposed to foster a sense of community and promote children's play. Six housing types were designed, with 2, 3, and 4 bedrooms, built in rows of 6 to 8 units on lots measuring 6.5 and 10 metres wide. To reduce construction costs, discarded material from the steel plant, known as 'cement-slag,' would be used, and families would engage in aided self-help housing. The transport circuit included roads of varying widths to accommodate heavier traffic and pedestrian access to the houses.[98] [fig.78-80]

97 CINVA, *Proyecto Sogamoso*, 62.
98 Ibid., 163-173.







Figs.78-80 CINVA Sogamoso project: urban designs of the Nobsa neighbourhood units, 1955. Source: CINVA, Proyecto Sogamoso, Box 47, CINVA.

In 1956, in his introduction to the Sogamoso project publication, Currie clarified that 'CINVA does not intend to undertake planning projects or train regional planners, but in order to intelligently and systematically address housing problems, a regional framework outline must be established.'[99] Nevertheless, the Sogamoso project marked CINVA's initial venture into regional planning, which was further developed during Eric Carlson's tenure as director. The Seminar of Technicians and Officials in Urban Planning was held in October 1958, and its conclusions were adopted under the name of the Andes Charter,[100] which would have had repercussions in Latin American countries such as Brazil.[101]

Continuing the trajectory of satellite city and neighbourhood unit design, in the late 1950s, ICT developed the Ciudad Techo project, which was later built in collaboration with CINVA and private firms such as World Homes. The project was constructed on the former Bogotá airport, which had been replaced in 1959. George A. McBride, a summer research fellow from Harvard University at CINVA, observed rapid industrialisation in the area. However, at the time of his writing, the site remained isolated with no nearby employment sources.[102] McBride also indicated that funding for Techo came from the DLF, IDB, Export-Import Bank, and USAID, accounting for one-third of the total project cost.[103] Recent research has highlighted the diverse housing typologies and construction options in Ciudad Techo,[104] particularly the aided self-help strategy, which initially constituted 45% of the project[105]. The variety of strategies employed is reflected in the various urban designs of the neighbourhood units, which also catered to different socio-economic groups.[fig.85]

99 CINVA, *Proyecto Sogamoso*, 13.
100 CINVA, 'Seminario de Técnicos y Funcionarios en Planeamiento Urbano', Final report (Bogotá: CINVA, October 1958), Box 46, CINVA.
101 Gorelik, *La ciudad latinoamericana*, 295.
102 George McBride, 'A Description of Proyecto Ciudad Techo - and an Analysis of Some of Its Economic Aspects', Course paper (Bogotá: CINVA, September 1962), 19, 58, Box 61, Folder 4, CINVA.
103 McBride, 'A Description', 16.
104 Nilce Aravecchia-Botas, 'Técnica y Política en La producción de la ciudad Latinoamericana. Ciudad Kennedy, Bogotá (1960-1963)', *A&P Continuidad* 6, no. 11 (2019), 70–81.
105 McBride, 'A Description', 4.

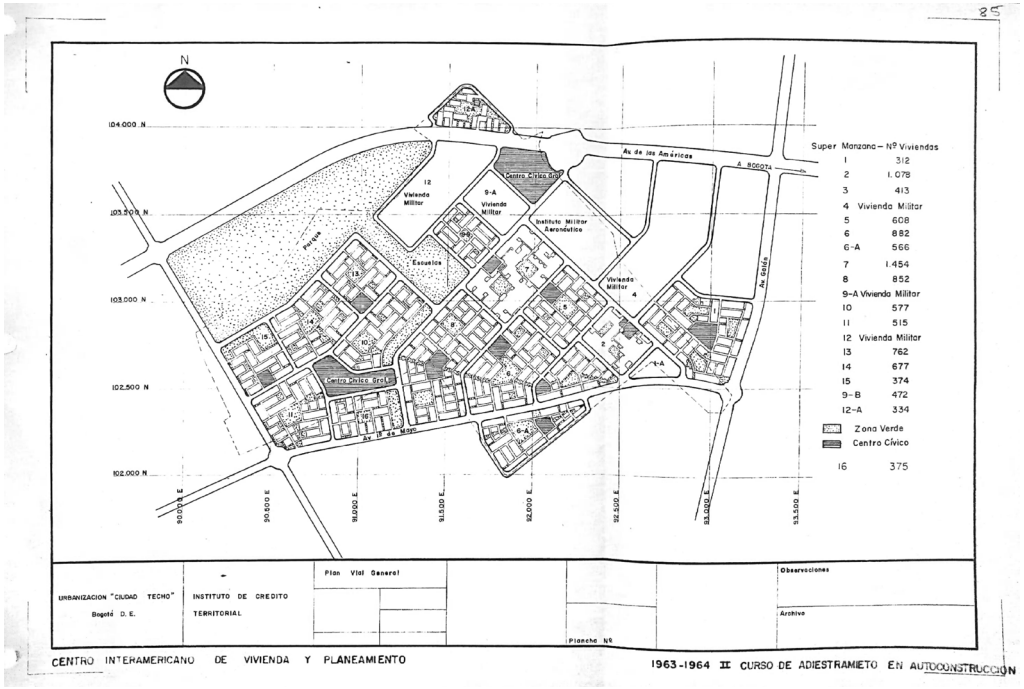
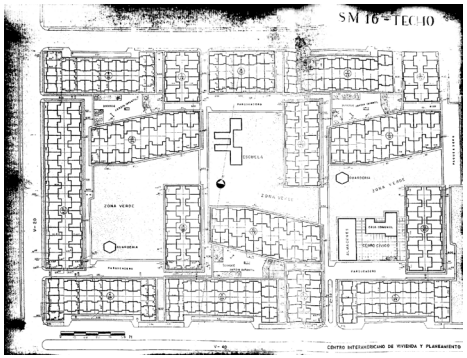
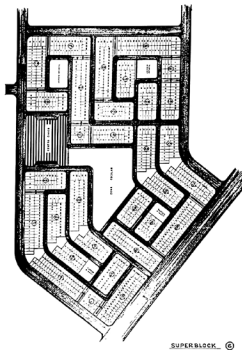


Fig.81 Ciudad Techo housing project. Source: Donath, 'II Curso', Box 43, CINVA.

Ciudad Techo was composed of neighbourhood units called super-blocks that offered 'services such as shops, churches, covered markets, police and fire stations, cinemas, health centres, bank branches, apartment administration facilities, tree-lined areas, parks and community centres.'[106] Several CINVA courses participated in this project's analysis, design, and construction. Professor Ruben Donath's course published the urban design with the different super-blocks.[fig.81] The number of families per super-block varied between approximately 2,800 and 7,000 inhabitants. Although most of the complex consisted of single-family dwellings, blocks 2 and 7 had a higher density as they included four-story buildings.[fig.85] The Donath course focused on the construction of super-block 16, which comprised single-family dwellings with two squares and a school at its centre.[fig.86] Super-block 6 resembled Vila Progresso

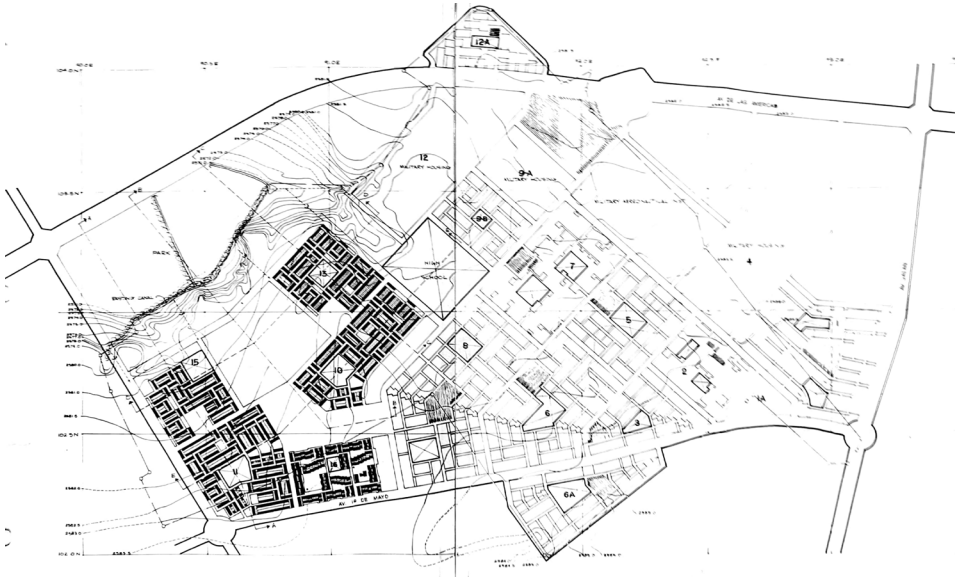
106 Jorge Rivera Páez, 'El CINVA: Un modelo de cooperación Técnica 1951 - 1972' (Master thesis, Bogotá, Universidad Nacional de Colombia, 2002), 157

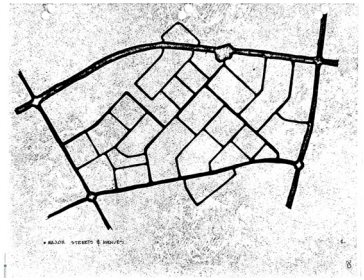


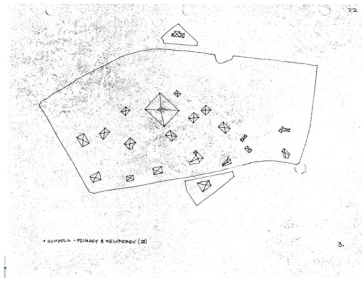


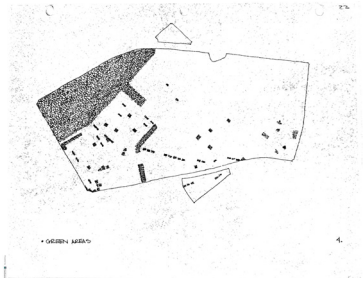
Figs.82-4 (top) Charles P. Fossum, Colombia AID mission director (right) and Fabio Robledo, manager of the Colombian Territorial Credit Institute, are shown in front of a multi-family unit under construction in Ciudad Kennedy (Ciudad Techo). The sign reads "Ciudad Kennedy Superblock No. 7. The Institute of Territorial Credit is building on this site 2,000 apartments for the middle class with the financial participation of the Inter-American Development Bank in fulfilment of the Alliance for Progress programme." Source: Box 3, RG286-CF, Photographs from the Country Files ca. 1961 – ca. 2002, NARA. (bottom) Ciudad Techo's superblocks 16 and 6. Source: (left) Donath, 'Il Curso', Box 43, CINVA. (righ) McBride, 'A Description'. Box 61, Folder 4, CINVA.

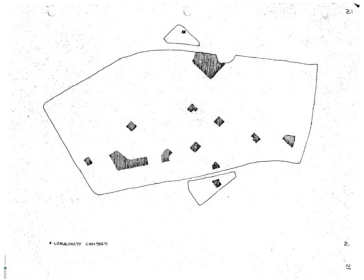
and Ciudad Satélite in Bolivia, which is reviewed below.[fig.84] In super-block 9-B, World Homes built single and two-story semi-detached dwellings, which are reviewed in the next chapter. The metropolitan roads were located on the perimeter, connected to Bogotá to the east. The super-blocks of housing, parks, and major civic centres were defined by winding interior roads, and a smaller network of streets provides access to the houses and squares.[figs.85-9]







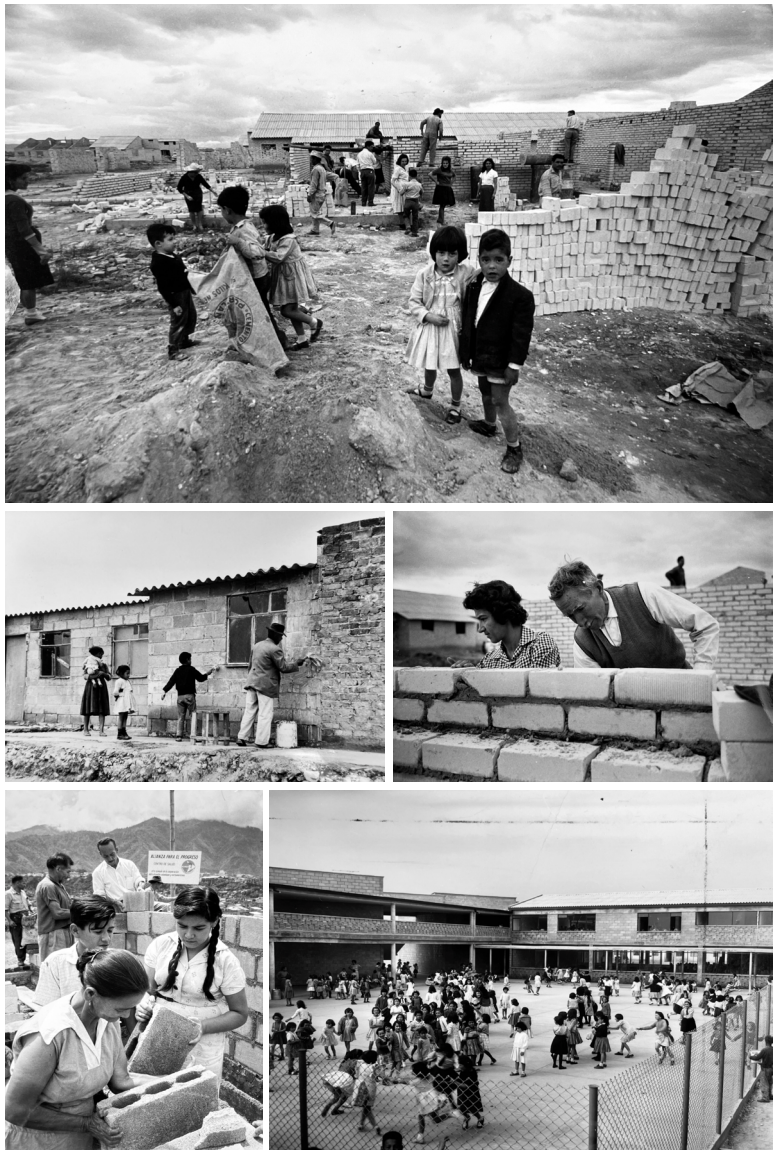




Figs.85-9 T. Reynold Williams, in his 1963 summer research, identified the different elements that composed Ciudad Techo's urban design, including main roads, community centres, schools, parks, single-family houses, and apartment zones. Source: T. Reynolds Williams, 'Self-Help Housing in an Urban Enviroment: An Example: Ciudad Techo', Summer research (Bogotá: CINVA, September 1963), Box 188, CINVA.

Figs.90-96 (top) Stills from films on the progress of the Alliance for Progress in Colombia. Source: 'Report From Colombia - 1963' and 'The Third Year (El Tercer Ano) - 1965' RG306 Records of the U.S. Information Agency, Moving Images Relating to U.S. Domestic and International Activities, NARA
Figs.97-106 (opposite page and page 238) Ciudad Techo under construction and first occupations of housing and educational establishments in the context of the Alliance for Progress. Source: Boxes 1 and 2, RG306-AFP, Photographs Relating to the Alliance for Progress, NARA.

Photographic and film records from the Alliance for Progress documented the gradual construction of housing and community facilities.[fig.90-6] Kennedy's promises of 'housing, education, and health' were being built and widely publicized, albeit slower than anticipated. The records showcased the aided self-help houses alongside high-rise buildings for the middle class. They also depicted the first families to arrive at Ciudad Techo, various schools, and the health centre that played a role in shaping the neighborhood.[figs.97-106] In 1965, Ciudad Techo changed its name to Ciudad Kennedy. It is currently one of the most densely populated areas in Bogotá.



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In recent years, scholars have researched the origins of Ciudad Techo, which provides a suitable case study for analysing aspects of Latin America's relationship with the US through housing planning. The project's economic characteristics are of particular interest, notably the use of self-help to reduce costs and the geopolitical scope of the Alliance for Progress in the region. Researcher Amy C. Offner has highlighted the significance of expanding private property through housing in connection with the prevailing development and modernization theories of the time and the pursuit of middle-class growth. Also, Offner provides an account of how aided self-help housing was expanded in Colombia during the presidential term of Alberto Lleras Camargo (1958-62), in consultation with CINVA and advisors from the US, an approach that the dictatorship of Gustavo Rojas Pinilla (1953-57) would have previously avoided.[107] Thus, between self-help strategies and housing finance 'this was a housing policy that was both developmentalist and austere, and legitimated both the state and private capital as guarantors of social welfare.'[108]

Scholar Nilce Aravecchia-Botas contributes aspects from architecture and planning that enrich the project's history within the context of disciplinary debates in Colombia and Latin America.[109] She refers, among other aspects, to the discussion between the position of developmentalist economists and an interdisciplinary approach, the latter identified with the trajectory of CINVA. Aravecchia-Botas points out that Ciudad Techo was a project subordinated to the economic debate in the field of architecture and urban planning. Thus, aided self-help was understood merely as the incorporation of labour to lower housing costs, and the architect

107 Amy Offner, 'Homeownership and Social Welfare in the Americas: Ciudad Kennedy as a Midcentury Crossroads', in *Making Cities Global. The Transnational Turn in Urban History*, ed. A. K. Sandoval-Strausz and Nancy H. Kwak (Pennsylvania: University of Pennsylvania Press, 2017), 59-62

108 Offner, 'Homeownership', 94.

109 Aravecchia-Botas, 'Técnica y Política'.

was not viewed as an 'educating agent who mobilizes and organizes available resources and assists in social organization.'[110] Moreover, '(a)s the Latin American city declined as a category of sociological thought, housing ceased to be understood as a right to be guaranteed by the State and became the result of family effort.'[111] This criticism would coincide with the administrative and academic changes that took place at CINVA in the early 1960s, corresponding to Rafael Mora Rubio's period as director.

Scholar Amanda Waterhouse provided a detailed description of the Ciudad Techo project within the context of the Alliance for Progress. Waterhouse suggested that the project's housing pursued an anti-communist agenda as '(t)hey offered the trappings of a liberal capitalistic quality of life in intimate and quotidian ways'.[112] She also emphasized the issue that '(d)espite the discourse of newness in US-Colombian politics at this time, as well as novelty of this built form of anticommunism that US officials pursued, their work relied on longer local continuities'.[113] Waterhouse argued that this phase of Ciudad Techo was a continuation of what the ICT had been doing since the late 1930s, and what Rojas Pinilla continued to do in the 1950s regarding access to housing. However, US officials would have 'overwritten' this continuity.[114] This idea relates to Aravecchia-Botas' analysis of the narrowing economic deployment of self-help in this housing project. The term 'overwriting' could be further qualified concerning the inter-American trajectories explored in this and the previous part.

The concept of 'longer local continuity' can be expanded to encompass a broader 'regional' continuity, which includes the various contact zones in the inter-American self-help trajectories and the use of neighbourhood unit ideas as a design module for

110 Aravecchia-Botas, 'Técnica y Política', 79, translated by author.
111 Ibid., 79, translated by author.
112 Waterhouse, 'Grassroots Architects', 159.
113 Ibid., 160.
114 Ibid., 160.

satellite cities, often incorporating single-family housing as a significant component. Numerous interactions between North and South cultures occurred through institutions and individuals, resulting in more complex outcomes than a unilateral absolute imposition. These encounters represent intersections where trajectories cross and meet through academic collaborations, consultancies, negotiations, and, at times, challenging constraints.

The implementation of the Alliance for Progress in 1961 and the availability of funds such as the SPTF and PL480 supported locally developed housing projects that could commence construction promptly. These projects represent the formalization of inter-American trajectories built since the 1930s, in which the US had played a relevant role in the region, as historian Adrián Gorelik has researched and as complemented here through the expansion of ideas of Clarence Perry.[115] The housing projects, financed by the Alliance for Progress, aimed to achieve modernization and middle-class expansion, as discussed in previous chapters, using the strategy of 'helping them to help themselves', which involved expeditious utilization of funds and instruments reviewed in the second chapter, as well as the expansion of capitalism through investment in the built environment. All of this unfolded within the intense context of the Cold War.

One outcome of these satellite city housing projects was the generation of poles of segregated urban development, exemplified in Vila Aliança and Vila Progresso located far from Rio de Janeiro, Ventanilla far from Lima, Hatillo separated from San José, and Techo on the outskirts of Bogotá. While the neighbourhood unit strategy allowed for the design of at least a fragment of self-contained urban space, community facilities were often absent during the initial housing construction. On the one hand, the Alliance for Progress requirement to include finished houses, rather

115 Adrián Gorelik, 'Pan-American Routes: A Continental Planning Journey between Reformism and the Cultural Cold War', *Planning Perspectives* 32, no. 1 (January 2017), 47–66.

than just aided self-help, some socio-economic integration began to take place. Hence, the dichotomy of these housing projects lies in the fact that, on the one hand, they were developed through social segregation, searching for inexpensive land far from urban centres. On the other hand, some of these projects socially integrated middle-class households with low-income families within their internal neighbourhood configuration.

This chapter has primarily discussed public-led projects to illustrate the architectures of neighbourhood units in Latin America. The subsequent section explores how the Alliance for Progress supported the expansion of private US companies' markets in the continent. This builds on the earlier discussion of World Homes Block 9-B in Ciudad Techo.

4

Modern neighbourhoods: investment in the middle-class

Texas, Arkansas, Miami, Arizona, Detroit, and Baltimore are some of the street names in Villa El Dorado —the legend of a city of gold— a neighbourhood built by the US company IBEC in Chile in 1961. El Dorado is in the municipality of Vitacura, a district in Santiago known for its concentration of economic wealth. The neighbourhood is bordered by the streets Gerónimo de Alderete (a Spanish conquistador), Padre Hurtado (a Chilean priest), Las Hualtatas (the indigenous name for a plant) and Presidente Kennedy. The previous section examined the impact of the Alliance for Progress on government-supported projects, while this chapter focuses on privately funded operations in Latin America by US companies. Villa El Dorado, for its part, ended up contributing to the development of a high-income urban area, reflecting the significant socio-economic segregation of Latin American cities.

The initial design of Villa El Dorado in 1961 included 806 single-family houses, accommodating approximately 4,500 people. Following the principles discussed in the previous chapter, the neighbourhood featured a central civic centre with some scattered squares.[fig.107] The perimeter streets served as main connecting avenues, while the inner streets were designed to reduce through traffic. The plot sizes were larger compared to previous satellite cities, measuring 13.6 metres in width and 22 metres in depth. The houses were detached and featured front and back gardens. The current civic centre of Villa El Dorado includes a sports centre, a church, a health centre, and a police station. Additionally, a school is in the neighbourhood's eastern sector.

Renner has analysed IBEC's trajectory in Latin America, while Dalal Alsayer's research has focused on its interventions in

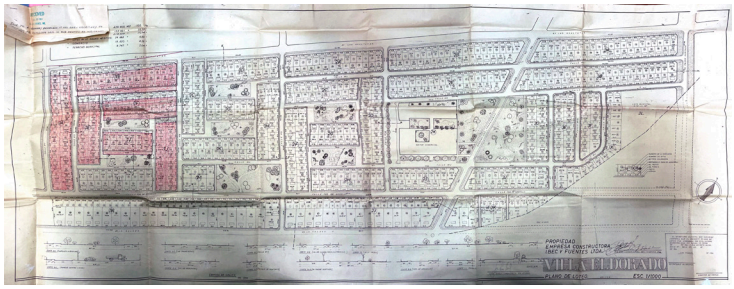


Fig.107 The Villa El Dorado housing project, constructed by the International Basic Economy Corporation (IBEC) in Santiago de Chile. Source: Box 74, Folder 26, WH.

Iraq.[1] Both histories highlight how foreign policy and available funding facilitated the involvement of US private companies in these contexts. Renner notes that IBEC projects resembled US 'garden city suburbs'. Similarly, this section shows that World Homes projects followed an inter-American trajectory, where ideas and designs from the North intersected with local architects in countries like Peru, Chile, and Bolivia. Also, the final section focusing on Bolivia illustrates how certain bureaucratic structures influenced the need to adhere to US standards, such as those established by the FHA, in housing construction throughout Latin America.

World Homes

> What can Eisenhower offer the world that Khrushev can't? Private property through homeownership.[2]
> —Willard Garvey, president World Homes, Wichita, KA

1 Dalal Musaed Alsayer, 'Architecture, Environment, Development: The United States and the Making of Modern Arabia, 1949–61' (Ph.D. Thesis, Philadelphia, University of Pennsylvania, 2019), 321-407; Renner, 'Housing Diplomacy', 170-227.

2 Ray Vines, 'Housing Solution to World Unrest?', *Wichita Eagle Magazine*, 11 Sept. 1960, Box 36, Folder 3, Jean and Willard Garvey World Homes Collection, MS 94-09, Wichita State University Libraries, Department of Special Collections (hereafter designated WH).

Willard Garvey was a member of a wealthy family business in Kansas US, primarily involved in wheat production, but with interests in various industries, including housing in Wichita, since 1929. However, in 1957, as demand for housing in his hometown declined, Garvey saw an opportunity to apply his experience in low-cost housing to the developing world.[3]

The idea for this venture emerged in 1958 when Garvey visited Nicaragua, where the government planned to construct 7,000 houses. He realized the key to fulfilling this housing need was access to long-term, low-interest mortgage financing. Garvey proposed a solution: the US should reinvest the $2 million obtained from the sale of its wheat in Nicaragua's housing.[4] This coincides with an anecdote he used to tell about the US ambassador in Managua telling him that 'if you put a man in a home, you make a little Capitalist out of him.'[5] Later, Garvey expanded on this concept in a brief text, developing the idea of 'every man a capitalist - every man a homeowner.'[6]

As a strategy for accessing US funds, the businessman argued that 'Russia represents Communism which is government ownership of property and slavement (sic) of men [...] USA represents Capitalism which is private ownership of property and free man.'[7] From then on, he spread his ideas in business and political circles. These concepts were instrumental in creating World Homes, the Wichita-based company Garvey founded to build houses abroad. His thoughts resonated with the company's executives, including E. Howard Wenzel, who moved to Peru to develop new markets. Wenzel described private homeownership as:

> [...] a tremendously powerful vehicle and probably could, as the number one program in our foreign policy, do more

3 Floyd Baird, 'Annual Report' (Wichita: World Homes, 1961), 1, Box 36, Folder 3, WH.
4 Ibid., 2.
5 Ibid., 2.
6 Willard Garvey, 'Every Man a Capitalist - Every Man a Home Owner', 19 Sept. 1958, 4, Box 7, Folder 21, WH.
7 Quoted in, Willard Garvey, 'Every Man a Capitalist', 19 June 1958, 1, Box 7, Folder 21, WH.

> to change the tide of the cold war than any one thing because it reaches people in the cities where the action is going to be taken and the revolutions are going to be supported, where the real political power exists and it tends to make constructive individuals out of them and make them far less susceptible to communist propaganda.[8]

On one side, there was a strategy of leveraging the Cold War tensions to extend the reach of the US housing market overseas. On another other side, Garvey was well aware of another funding source: agricultural surpluses.

> In the mid to late 1950s, US unemployment levels rose right along with the wheat levels in the massive Garvey grain elevators in Kansas and Nebraska. Postwar federal farm subsidies encouraged farmers to plant, so plant they did. By 1958 [...] the US had a $7 billion agricultural food surplus and a new problem of what to do with it.[9]

As explained in the second chapter, the US offered its agricultural surpluses to developing countries, allowing them to purchase them in their local currencies. The funds acquired through these purchases were then invested in economic development programmes within the respective countries. The loans were expected to be repaid to the US in the long term. Companies like IBEC and World Homes were involved in incorporating housing into this development agenda, with the middle class being the primary target market.fig.108

Garvey even tried to hijack this government strategy. In a memorandum titled Wheat for Homes, he wrote to the President of Peru's military junta, Ricardo Pérez Godoy, in 1962. Garvey proposed that Peru could directly purchase wheat from him

8 Quoted in letter from Howard Wenzel to Lee Thayer, 25 Feb. 1963, 2, Box 1, Folder 2, WH.
9 Maura McEnaney, *Willard Garvey: An Epic Life* (Oakland: LibertyTree Press, 2013), 167.

Fig.108 World Homes and IBEC executives in Sol de Oro housing project, Peru. Source: Box, 94, Folder 7, WH.

without the US government's involvement as an intermediary. He suggested using the sales revenue in Peruvian currency to reinvest in constructing Hogares Peruanos homes, thus contributing to the country's development.[10]

In addition to the advertising and persuasive strategies employed to win over politicians and businesspeople, Garvey was knowledgeable about housing expansion strategies in developing countries, particularly in Latin America. In a report titled 'The role of housing in a developing economy', co-signed with Paul Harrison in October 1960, they described the housing experience in Puerto Rico since the 1940s, the importance of FHA mortgages and the role of Savings and Loan associations. They also recognized the importance of the recently signed Act of Bogotá of September 1960 as a blueprint for future housing projects.[11] While Garvey and executives from World Homes, such as Florian Baird

10 Willard Garvey, 'Memorandum Wheat for Homes', 22 Aug. 1962, Box 7, Folder 21, WH.
11 Paul Harrison and Willard Garvey, 'The Role of Housing in a Developing Economy' (Wichita: World Homes, 1 Oct. 1060), Box 36, Folder 14, WH.

Fig.109 Willard Garvey and Jean Garvey during their visit to Latin America for housing development initiatives.. Source: Box, 13, Folder 31, WH.

and James D. van Pelt, explored and presented proposals in Africa and Asia, it was within the context of the Alliance for Progress that they achieved the greatest success by gaining access to countries in Latin America. Leveraging various instruments and funds, including the SPTF, Cooley Loan PL480, and the Housing Guaranties discussed in the second chapter, World Homes embarked on constructing housing estates in Mexico, Colombia, Peru, and Bolivia during the 1960s.

To establish their projects, World Homes actively sought political and commercial alliances in each country through embassies and local USAID contacts. Also, they formed subsidiary companies in collaboration with local investors. For instance, they established Hogares Colombianos with a local lawyer, Hogares Mexicanos with an architectural firm, and Hogares Bolivianos with the Jockey Club of La Paz, among other partnerships. Project managers moved to live in each country, such as Howard Wenzel in Peru, Theodore Atha in Bolivia, and Donald Carmichael in Colombia.

World Homes also formed connections with local offices, including Quiroga Rivas in Bolivia or Guzmán Laverde in Colombia —the latter continued their involvement as the chairman of the La Paz project. Floyd M. Baird and James D. van Pelt coordinated regional activities and travelled between Wichita and the countries in the South. Garvey made numerous trips worldwide to visit projects and support exploring new markets.[fig.109]

The history of World Homes has recently been examined by historian Nancy Kwak and architectural historian Helen Gyger, focusing on Peruvian projects. Kwak delves into Sol de Oro, and Gyger brings Villa Los Angeles into the company's history.[12] Although Kwak emphasizes that the designs of World Homes projects did not vary significantly across countries, there are subtle architectural differences influenced by factors such as climate, material availability, and site requirements.[13] Additionally, as described below, World Homes engaged local architects or designers who were familiar with the specific conditions of the countries where they operated. Examples include the involvement of Ernesto Aramburu's office in Peru, Arquitectonica in Mexico, and Larraín, Prieto, Risopatrón in Chile, among others. Kwak rightly points out that World Homes neighbourhoods were well-received by Peruvian society, as there existed a history of urban planning and design ideas in which the US played an important role. Kwak illustrates this by referencing the emulation of the garden city concept and the influence of projects like Radburn in New Jersey by Stein and Wright.[14] However, as shown in the preceding section, the trajectory of inter-American ideas regarding neighbourhood units exhibits greater nuanced and varied translations than that specific reference.

12 Gyger, 'The Informal as a Project', 165-183; Kwak, A World of Homeowners, 127-165; Helen Gyger, *Improvised Cities: Architecture, Urbanization & Innovation in Peru* (Pittsburgh: University of Pittsburgh Press, 2019), 208-220.
13 Kwak, *A World of Homeowners*, 129.
14 Ibid., 140.

Fig.110 World Homes model house exhibited in Thailand. Source: Box, 94, Folder 14, WH.

Although this section focuses on the Latin American trajectory, it is worth noting that World Homes also studied proposals or carried out projects in other 'third world' countries during the 1960s, including Morocco, Jamaica, Thailand, India, Taiwan, Pakistan, and more.[fig.110]

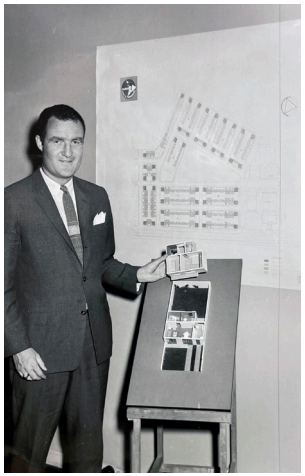
Fig.111 World Homes model house exhibited in Lima, Peru. Source: Box 58, Folder 2, WH.

Hogares Peruanos

The first country where World Homes was established was Peru in 1959. This decision was influenced by the availability of PL480 funding at that time in that country. James Donaldson travelled to Peru and established Hogares Peruanos, initiating a pilot project known as Operation Guinea Pig. Unfortunately, Donaldson's untimely demise occurred a few months later due to bulbar polio, which he contracted during a trip to Pakistan, where he was trying to open up new markets for the company. Following Donaldson's passing, Howard Wenzel assumed leadership and relocated to Peru to oversee the project in collaboration with Rodolfo Salinas.[15]

Wenzel embraced Garvey's belief that homeownership was the most effective pathway to middle-class status in 'underdeveloped' nations. He advocated for the direct allocation of US funds to private companies for managing and constructing housing

15 Baird, 'Annual Report', 3.



Figs.112-6 (previous page, top to bottom): Advertisement for the Urbanización Ingeniería project. / Angélica G. de León Valverde with Howard Wenzel at the inauguration of the Villa Los Angeles project. / Peruvian architect Ernesto Aramburu at a press conference about the Sol de Oro housing project. / Howard Wenzel presenting the Sol de Oro housing project. / View of the Sol de Oro housing project. Sources: Box 58, Folder 2; Box 94, Folders 1 and 7, WH.

projects, thereby circumventing local governments.[16] One of Wenzel's initial endeavours involved constructing a model house, which he envisioned selling and replicating in various locations across Lima.[17] Regarding Kwak's perception of World Homes' reliance on standardized house designs, the company's internal annual report for 1961 stated:

> Observing from extensive studies, it had been learned that materials, methods, techniques, and design differed from country to country. Often these differences were as a result of climate or availability of materials, but sometimes they were dictated by custom. Therefore, Wenzel took no preconceived ideas to Peru. What was taken to Peru was American builder know-how—the technique of building large projects of low-cost homes.[18]

Hogares Peruanos enlisted the services of local architect Ernesto Aramburu to design the model house, which they intended to sell as a 'package home' —Aramburu later went on to make significant architectural projects in Peru and also served as the mayor of the city of Miraflores. The package home project faced challenges and ultimately failed due to various reasons. Despite offering a standard house, clients desired individual modifications, such as changing window sizes, door types, using different colours, or adapting the bathrooms, which resulted in increased costs and complexity. Lesson learned.[19]

Soon after, in December 1960, Hogares Peruanos successfully constructed the first 72 houses in Urbanización Ingeniería, which was the Operation Guinea Pig initiated by Donaldson. The funding for this endeavour came from World Homes and the Cool-

16 Wenzel, 'Letter to Lee Thayer', 25 Feb. 1963, 4.
17 Baird, 'Annual Report', 4.
18 Ibid., 4.
19 Wenzel, 'Letter to Lee Thayer', 25 Feb. 1963, 2, 4.

Figs.117-23 (above) World Homes booth promoting the housing project. The signs read 'Sol de Oro is a complete community' and 'In Sol de Oro, your family will be happy'. (opposite page) Sol de Oro housing project, Lima, Peru. Source: Box 94, Folders 1, 2, 3, 14, and 20.

ey Loan facilitated through the Export-Import Bank.[figs.111-2] Following this achievement, Wenzel began planning the Sol de Oro project, a neighbourhood comprising 457 detached houses in the northern part of Lima. Once again, Ernesto Aramburu was entrusted with the architectural design for this project.[20] [figs.114-6] Hogares Chavarría, a subsidiary of Hogares Peruanos, carried out the project, with the participation of Peruvians like Angélica G. de León Velarde, owner of Hacienda Chavarría, which provided the land for both Sol de Oro and Villa Los Ángeles.[21] [fig.113]

Aligning with the concept of a neighbourhood unit prevalent at the time in Peru, Sol de Oro was promoted as a comprehensive community, offering access to essential services and amenities such as a school, church, market, and social centre.[fig.117] Aramburu's designs also included the YMCA building, which shared a similar design with the school located next to the houses.[figs.118-9] In addition to the houses' modern architecture, attention was given to creating a 'modern' interior ambience, as seen in the furnishings in the model house.[figs.120-3] The objective was to attract middle-class Peruvian homeowners who could expand their houses into the backyard or

20 Baird, 'Annual Report', 4.
21 World Homes, 'Application to AID for Housing Investment Guaranty', 1 May 1964, Box 42, Folder 6, WH.

Fig.124 Sol de Oro housing project, Peru. Source: Box 94, Folder 12, WH.

additional floors in the future.[22] The construction of the complex spanned approximately ten years, with different types of housing being built and new owners moving in as each phase reached completion.[figs.124-27] During one of these stages, in November 1965 —two years after John F. Kennedy's death— his brother Robert Kennedy, then a US Senator, visited the Sol de Oro project.[figs.128-29]

In September 1963, the Villa Los Angeles project was inaugurated adjacent to Sol de Oro, creating a neighbourhood unit where the houses encircled an elongated central square.[figs.130-2] Hogares Chavarría collaborated with a local cooperative of 500 members and received support from the IDB for this initiative.[23] Aided self-help was considered as one of the construction strategies. Although Kwak points out that Garvey did not refer to or consider the self-help ideas of John F. C. Turner,[24] this was a strategy that World Homes had been considering for some time. During a trip to Chile in 1960, Garvey expressed his desire to combine private finance with the aided self-help technique after visiting the San Gregorio housing project.[25] Later, in 1963, both James D. van Pelt and

22 'La Urb. 'Sol de Oro' Se Inaugura Mañana', *La Prensa*, 1 Sep. 1962, Box 36, Folder 13, WH.
23 Rodolfo Salinas, 'General Report on the Peruvian Operation' (Lima: Hogares Peruanos, 8 May 1970), Box 5, Folder 2, WH.; Gyger, *Improvised Cities*, 214.
24 Kwak, *A World of Homeowners*, 146.
25 Letter from Edmon Hoben to Stanley Baruch, 11 April 1960, Folder Program Housing 1960, Box 19, RG469, Unclassified Subject Files 1949 – 1961, NARA.

Figs.125-29 Sol de Oro housing project. (top) The sign reads 'Your own home in the residential development' (bottom) Visit of US Senator Robert Kennedy to the housing project in 1965. Source: Box, 94, Folders 12, 14 and 20, WH.

Figs.130-2 VIlla Lo Angeles housing project. Source: Box 94, Folders 1 and 14, WH.

Fig.133 Trujillo housing project. Source: Box, 94, Folder 21, WH.

Floyd M. Baird separately wrote to Ernst Weissmann, who was still at the UN, to learn about Turner's work in Arequipa and to obtain the UN self-help manuals.[26] Additionally, Gyger's research highlights the coordination efforts that Turner undertook for World Homes at the suggestion of Wenzel during the Villa Los Angeles project when self-help was considered as a means to reduce project costs.[27] However, this alternative was ultimately discarded. Wenzel later pointed out that self-help was time-consuming from an administrative standpoint, and they lacked the necessary expertise to properly supervise the work, which often resulted in failures.[28]

Almost simultaneously, in October 1963, World Homes inaugurated a small project consisting of eight two-story terraced houses in Trujillo, a city in northern Peru.[fig.133] The project was carried out in collaboration with local engineers from Risco-Tor-

26 Letter from James D. van Pelt to Ernest Weissman, 13 Feb. 1963, Box 1, Folder 2, WH; Letter from Floyd M. Baird to Ernest Weissman, 11 Feb. 1963, Box 1, Folder 2, WH.
27 Gyger, *Improvised Cities*, 214-9.
28 Wenzel, 'Letter to Lee Thayer', 25 Feb. 1963, 4.

res. These houses featured three bedrooms and a courtyard. The billboard displayed the logos of the Alliance for Progress alongside the name of Hogares Peruanos, as the IDB financed the project through SPTF funds obtained by the priest Álvarez, who served as the president of the Santo Domingo Credit Union.

The houses built by World Homes in Peru, as well as in other countries discussed below, followed a similar approach. They were single-family houses with gardens, typically featuring two or three bedrooms, a kitchen, bathroom, living room, and dining room. However, the designs were adapted to meet local needs and building material availability, particularly in countries where the construction industry was still developing. For instance, a shortage of bricks caused delays in the San Miguel project in Bolivia, while in Colombia the developer of the complex manufactured their own construction materials. Additionally, designs were tailored to suit different climates. The flat roofs seen in Lima differed from the pitched roofs in La Paz. This section also showcases variations in housing arrangements, such as isolated single-story houses on individual plots, as seen in Mexico, or two-story terraced houses, as seen in Trujillo and described below in Ciudad Techo, Colombia.

Hogares Colombianos

World Homes' first project in Colombia took place in Ciudad Techo, with the support of a PL480 'a phase of the US' Food for Peace program administered by AID.'[29] fig.134 Teodoro Moscoso signed the agreement, then the Alliance for Progress coordinator.fig.143 The objective was to construct 474 houses, consisting of single-story 3-bedroom houses measuring 60 square metres and two-story 4-bedroom houses measuring 100 square metres. Each house would have its own courtyard, and the plots would be 6 by 17

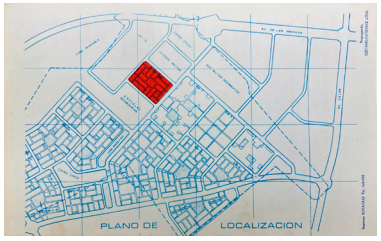
29 USAID, 'Press Release - 'Cooley' Loan to Finance Colombia Housing Project', 17 April 1962, Box 36, Folder 3, WH.

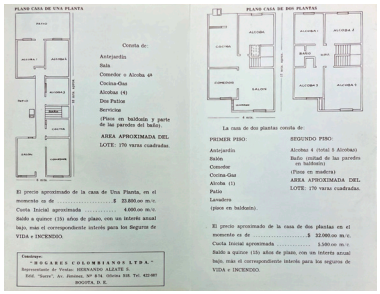
Fig.134 World Homes housing project in Ciudad Techo, Bogotá, Colombia. Source: Box 94, Folder 10, WH.

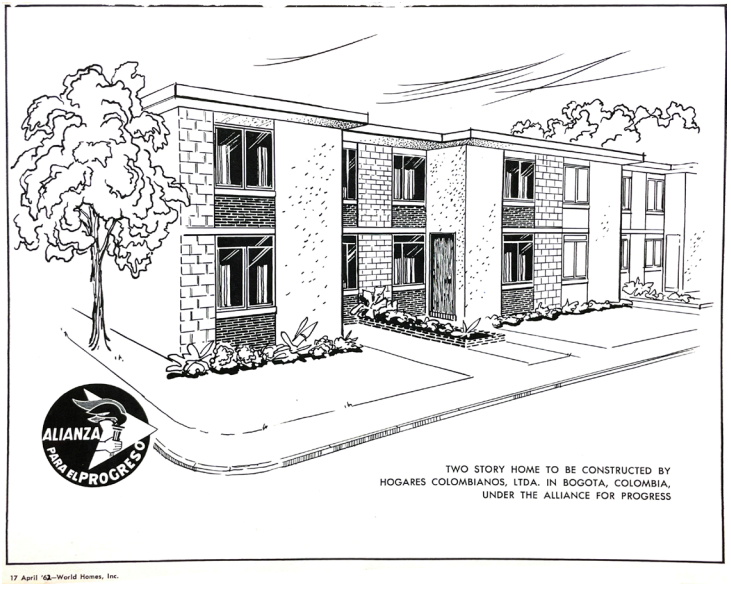
metres (102 square metres) in size.figs.135-8 The future homeowners would have fifteen years to pay for their new homes.[30]

The project was developed by Hogares Colombianos, a partnership between World Homes, Genaro Payán —a Colombian attorney—, and Donald Carmichael —a US real estate entrepreneur acting as general manager of Hogares Colombianos.[31] fig.139 The local engineering, architecture, and construction firm of Alfonso Guzmán and Germán Laverde executed the project, which received positive feedback from James P. Sullivan, World Home vice-president for Latin American Operations.[32] Laverde later continued working as the president of Hogares Bolivianos, settling in La Paz to complete the San Miguel project.

30 Ibid., 2.
31 Ibid., 2.
32 James P. Sullivan, 'Trip Report Summary' (World Homes, 24 Nov. 1964), Box 2, Folder 1, WH.







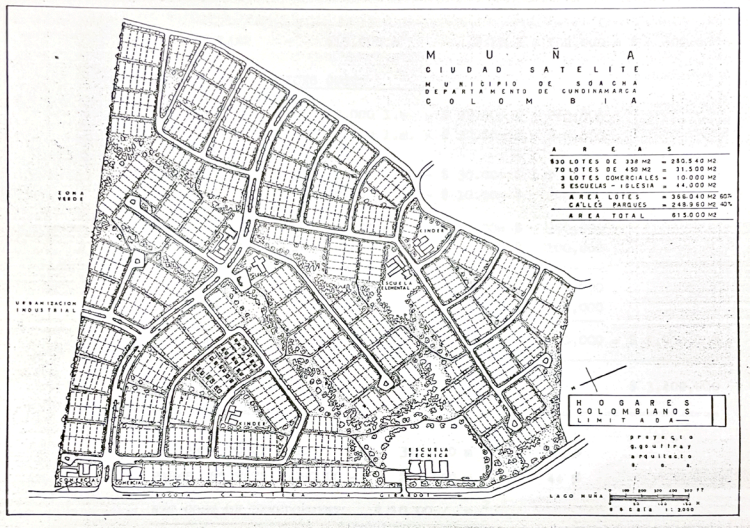
Figs.135-8 Promotional material for the World Homes housing project in Ciudad Techo. Source:Box 94, Folder 23, WH.

Figs.139-43. In the middle photo, Teodoro Moscoso, then coordinator of the Alliance for Progress, is signing an agreement to co-finance the Ciudad Techo project. World Homes, through its subsidiary company Hogares Colombianos, constructed a portion of the housing for Ciudad Techo Source: Box 94, Folders 1, 8, 9 and 14.

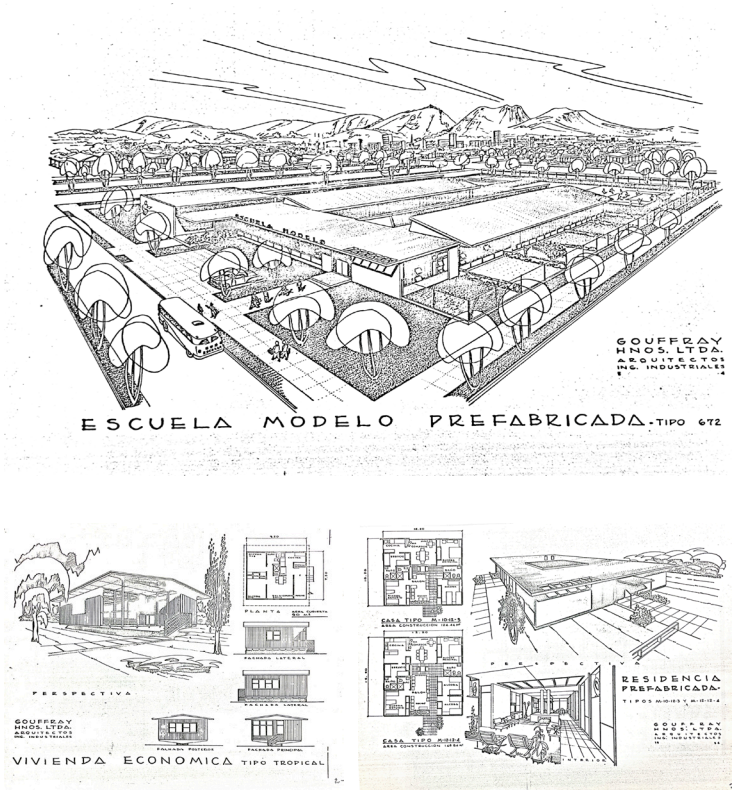
According to the company, World Homes chose to build in Colombia due to the country's housing deficit of 275,000 houses in 1961, primarily affecting the low and low-middle income population.[33] Moreover, the social situation in Colombia aligned with Garvey's argument for constructing housing projects: '(l)ow-cost housing projects [...] would contribute in an important way in alleviating social unrest in Colombia and, thus, help solve the political difficulties that prevail throughout the Country.'[34] Initially, they considered the possibility of building in Cali where, according to their reports, the urban population was growing as a result of migration caused by violence in rural areas. They hoped to garner support from the US Embassy and advocate to the US Department of State to recognize the political significance of a housing project in the area.[35] This occurred just before their involvement in the Alliance for Progress project developed with ICT in Ciudad Techo.

Other World Homes projects in Colombia included a 1962 study on developing satellite cities in five urban growth areas: Barranquilla, Valle del Cauca, Bucaramanga, Medellín and Bogotá.[fig.144] The most elaborate was a proposal for neighbourhood units for Muña, in Soacha, southwest of Bogotá.[fig.145] The aim was to provide low-cost housing in an industrial area.[36] The proposal was signed by E. Lee Hentzchell, an urban and regional planner at Virginia Polytechnic Institute, and architect Gonzalo Gouffray of the University of Toronto. The urban design followed the logic of programmatic diversity and circulation for automobiles and pedestrians that has been previously reviewed. In this case, it was 900 single-family plots with three schools, retail, a church and access to nearby medical services.[fig.146] It was thus hoped that US funding would be secured because '(t)he Alliance for Progress stipulates that money shall be

33 Donald Carmichael, 'Information and Recommendations for Hogares Colombianos' (World Homes, June 1961), Box 74, Folder 3, WH.
34 Ibid., 2.
35 Ibid., 12.
36 Hentzschel E. Lee and Gonzalo Gouffray, 'Industrial Housing Communities for Colombia, South America' (World Homes, n.d.), Box 36, Folder 11, WH.



Figs.144-5 (top) (top) World Homes' studies for satellite cities in Colombia; (bottom) the proposed neighbourhood unit for Muña. Sources: Box 36, Folders 9 and 11, WH.



Figs.146-8. Community facilities and housing proposed for the neighbourhood unit in Muña, Colombia. Source: Box 9, Folder 11, WH.

made available for integrated projects of this type.'[37] The low-cost comprised two to three bedrooms in 80 to 90 square metres. Prefabricated houses of 149 square metres were also proposed.figs.147-8 These studies were not developed further. As early as 1964, World Home was considering selling its shares in Hogares Colombianos due to financial problems and disagreements with local partners.[38]

37 Ibid., 18.
38 Letter from James D. van Pelt to Howard Wenzel, 6 Feb. 1964, Box 1, Folder 21, WH.

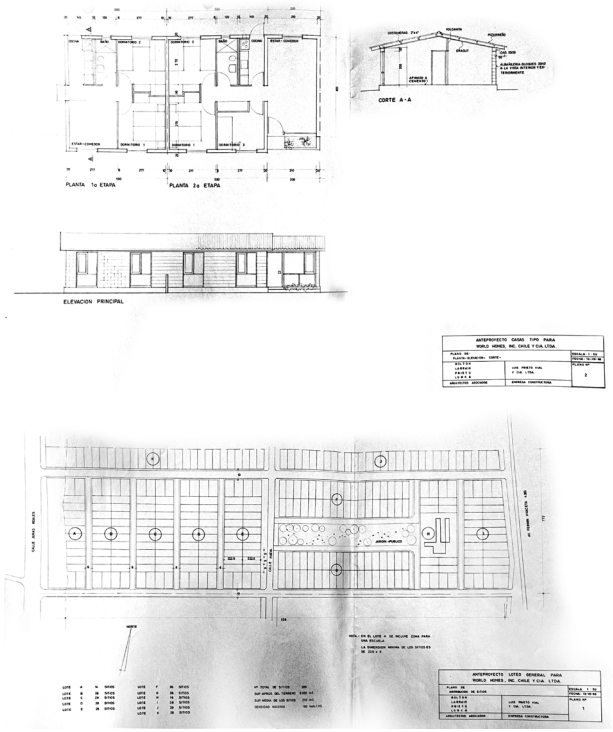
Hogares Chilenos

In 1962, World Homes explored the possibility of establishing Hogares Chilenos. Wenzel, representing World Homes, visited Chile as part of a trip organized by USAID Savings and Loan advisor Marlo Schram. During his visit, Wenzel met with influential architects such as Fernando Castillo Velasco and Hernán Labarca, as well as Jorge Guzmán from AHORROMET Savings and Loan association, who pledged funding. Jorge Ugarte from the Chilean Chamber of Construction also supported Wenzel's ideas. John Fabel, the economic counsellor of the US Embassy, was also part of the meetings.[39]

In 1965, World Homes made a concrete investment attempt in Chile after IBEC withdrew from a project it was undertaking with the steel company CAP in Talcahuano, located in the south of Chile. The project, called Villa Presidente Ríos, aimed to construct 1,500 homes and community facilities in four neighbourhood units adjacent to the Huachipato plant in an industrial district. The primary buyers were intended to be the workers in the area.[40] However, the project failed in due to economic differences between General Connecticut's proposal, the requirements of the Central Bank of Chile, and the financial responsibilities to be assumed by CAP. In September 1965 it was pointed out to Edmund Learned of World Homes that IBEC had transferred all the site design material, and costs to CAP, so he would have to contact them if the project was to be reactivated, but in the end the project did not go ahead.[41]

A year later, World Homes attempted to build in Santiago, in central Chile, in collaboration with the Chilean real estate

39 Howard Wenzel, 'Memorandum Establishment of World Homes, Inc Subsidiary in Chile' (Hogares Peruanos, 26 Oct. 1962), Box 74, Folder 26, WH.
40 CAP, 'Memorandum Huachipato Housing Project' (CAP, April 1965), Box 74, Folder 25, WH.
41 Edmund Learned, 'Memorandum Chilean Housing Venture', 3 Sept. 1965, Box 74, Folder 25, WH; Letter from J. A. Kelly, IBEC, to Edmund Learned, World Homes, 8 Sep. 1965, Box 74, Folder 25, WH.



Figs.149-50 Housing project in Santiago de Chile. Source: Box 74, Folder 25, WH.

company Larraín, Prieto, Risopatrón. These architects, along with Carlos Bolton, had designed and constructed various modern architectural projects in the country. The development in Santiago consisted of 289 two-bedroom semi-detached houses. The neighbourhood unit had a central square that ended in a school.figs.149-50 It was located on Vivaceta Street, northwest of Santiago, in the present-day municipality of Conchalí. The idea was to set up a subsidiary between World Homes and Larraín, Prieto, Risopatrón, who

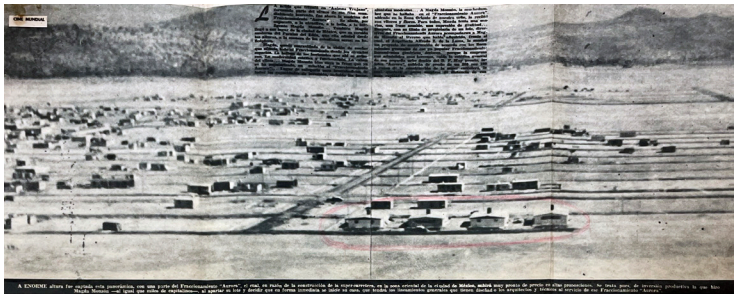
Fig.151 Homex housing project in Mexico. Source: Boc 94, Folder 6, WH.

would share the profits equally. The sale of houses would involve the participation of the Savings and Loan institution La Renovación.[42] However, a market study conducted in August 1966 indicated that it would not be possible to attract buyers at the required value to generate sufficient profit for the investor.[43]As a result, the project did not proceed further.

Hogares Mexicanos

World Homes set up Hogares Mexicanos with a similar structure to that described in Chile. It was a partnership between World Homes and the local firm Arquitectonica, although its general manager was a US architect, Raymond Wright. Wright, who studied architecture at Columbia University and the University of North Carolina, settled in Mexico in the 1950s after receiving a scholarship to study at the National University of Mexico. In 1957, he founded Arquitectonica and collaborated with World Homes in the early 1960s to develop studios and a 16-home project in Aurora.

42 Larraín, Prieto, Risopatrón, y Cía. 'Proyecto Vivaceta', 15 July 1966, Box 74, Folder 25, WH.
43 Jack Bode, 'Memorandum Preliminary Summary of Caribbean and Latin American Trips' (World Homes, 16 September 1966), Box 4, Folder 3, WH.



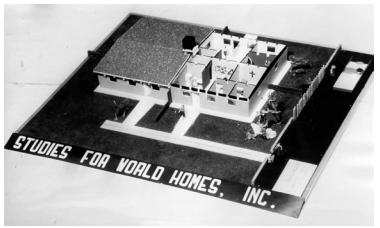


Fig.152-5. (previous page and top) Aurora housing project, Mexico / (bottom) Arquitectonica studies for World Homes in Mexico. Sources: (previous page) Box, 94, Folders 1 and 14, WH.

A long article/advertisement about Arquitectonica's work, entitled 'Satellite Cities Grow in Mexico', claimed that Mexico's slums were 'fertile ground for Communism —for a Mexican style Fidel Castro to take root— and also a challenge for President Kennedy's Alliance for Progress program'.[44] Wright employed arguments similar to Garvey's to advocate for expanding homeownership in the country, without mentioning World Homes in the article. The strategy his work followed was satellite cities and low-cost self-sufficient neighbourhood units built on the periphery, as a way to avoid building on Mexico's existing urban history.

44 'Satellite Cities Grow in Mexico', *World, The Compact National Newspaper*, n.d., Vol. 1, No. 9, Box 36, Folder 3, WH.

The Aurora project, initiated in 1961, was situated south-east of Mexico City. Hogares Mexicanos, in collaboration with Arquitectonica, constructed sixteen houses as part of a larger development comprising neighbourhood units with 400 to 1,200 dwellings, a central plaza, and amenities such as schools, shops, and nurseries.[figs.152-3] The houses were approximately 45 square metres in size, featuring two or three bedrooms and a garden on plots measuring 120 square metres.[45] Arquitectonica's studies for Hogares Mexicanos included neighbourhood units with large civic centres, as well as designs for hospitals, schools and markets.[figs.154-5]

45 Ibid.

Figs.156-60 Homex housing project, Mexico and World Homes logos. Sources: Box 5, Folder 2; Box 94, Folders 6 and 14, WH.

In 1964, Hogares Mexicanos also embarked on a preliminary project to construct 6,000 low-cost houses in Ciudad Labor. Additionally, the Homex project was underway in San Cristóbal de Ecatepec, located northeast of Mexico City. Homex comprised 640 houses and shopping centres. These three-bedroom houses, measuring around fifty square metres, featured flat and inclined roofs.[fig.151] The marketing emphasized detached houses built on 'your land!!', 'surrounded by your own garden', and also promoted the idea of homeownership and future capital gain.[figs.156-8] The houses were connected to basic services and surrounded by trees, schools, markets, and playgrounds. The development was situated in an industrial zone with 16,000 employees.[46] The second phase of the project was completed around 1970, during a period when World Homes was on the verge of dissolution.[47]

* * *

'By 1972, World Homes (...) would be gone, liquidated with no assets remaining, corporate losses of up to $400.000, and personal losses up to $1 million.'[48] What Willard Garvey once described as the most brilliant idea of his time failed to survive bad business decisions and political and economic instability of the second half of the 20th century.

This concludes a series of ideas for satellite cities and neighbourhood units that have travelled across the Americas with government and private funding. The following chapter examines the development of an IDB-supported satellite city in Bolivia and a model neighbourhood built by World Homes with local stakeholders and USAID backing.

46 van Pelt, 'Letter to Howard Wenzel', 6 Feb. 1964, 1 (4810); Letter from James D. van Pelt to Donald Carmichael, 22 April 1965, Box 2, Folder 1, WH.
47 Hogares Mexicanos, 'Weekly Progress Report' (Mexico D.F.: Hogares Mexicanos, 24 April 1970), Folder 5, Box 3, WH.
48 McEnaney, *Willard Garvey*, 179.

5

Suburbs in the highlands of El Alto and the valley of La Paz, Bolivia

In 1959, Bolivian President Hernán Siles Zuazo told a disillusioned Charles Abrams that his government could raise only a quarter of the $1 million needed to implement his proposed housing programme. However, the financial situation changed radically in 1963, when the IDB provided Bolivia with a loan of $4 million exclusively for housing as part of the Alliance for Progress. This was followed by another loan of $5.5 million in 1967 for housing projects. Additionally, USAID lent $1 million to private companies associated with Savings and Loan institutions to promote the construction of a middle-class neighbourhood. These loans came with conditions such as the encouragement of homeownership and the need for institutional restructuring. As a result, CONAVI and La Primera, a new housing institution and a start-up local Savings and Loan association, began to build housing projects for low and middle-income people using funds from the Alliance for Progress.

This chapter examines the establishment of two urban development poles in La Paz during the 1960s, in response to the country's housing challenges, with the assistance of the IDB and USAID. The first pole focused on fostering urban growth for the working class and low-income population towards El Alto, situated in the harsh highlands. The second pole aimed to provide an area for Bolivia's middle and upper-income strata in the southern zone of the La Paz valley. Both operations adopted the neighbourhood unit model, featuring detached single-family houses with front and back yards, along with schools, shopping centres and community facilities.

Alliance for Progress in Bolivia

The Alliance for Progress unfolded in Bolivia during a period marked by political instability, frequent government turnovers, and multiple coups attempts and coups d'état. From 1960 to 1964, Bolivia experienced the final phase of the Nationalist Revolutionary Movement (MNR) government after the Bolivian revolution. President Víctor Paz Estenssoro enjoyed significant support from the Alliance and the Kennedy administration, although his term was not without political tensions with the US.[1] In 1964, Estenssoro was overthrown in a military coup led by General René Barrientos. The US government swiftly recognized Barrientos' rule and supported him during this period. Barrientos led an authoritarian regime until his death in a helicopter crash in 1969.[2]

Following Barrientos' demise, Vice President Luis Adolfo Siles Salinas assumed the presidency, but faced another military coup that led to his ouster a few months later. General Alfredo Ovando Candia assumed power, implementing a series of left-wing reforms that included the nationalization of major industries.[3] However, General Juan José Torres succeeded him as early as 1970, establishing a more left-leaning government.[4] Torres' government was short-lived, as he was overthrown in a military coup in 1971, and General Hugo Banzer seized power. Banzer established a right-wing military dictatorship that lasted until 1978.[5] The third part of this study will examine how Banzer's administration received significant economic support from the World Bank.

The Cold War in Bolivia played out in a number of ways, with the US providing both financial aid and military support to

1 Thomas C. Field, *From Development to Dictatorship: Bolivia and the Alliance for Progress in the Kennedy Era* (Ithaca: Cornell University Press, 2014).
2 James F. Siekmeier, *The Bolivian Revolution and the United States, 1952 to the Present* (University Park: Pennsylvania State University Press, 2011).
3 James Dunkerley, *Rebellion in the Veins: Political Struggle in Bolivia, 1952-82* (London: Verso, 1984), 161-77.
4 Ibid, 178-200.
5 Ibid., 201-48.

Fig.161 Alliance for Progress in Bolivia. Source: Box 1, RG286-CF, Photographs from the Country Files ca. 1961 – ca. 2002, NARA.

the local government as part of its anti-communist efforts. Ernesto Che Guevara had been present in Bolivia since 1966, aiming to establish a guerrilla movement.[6] In 1967, the Bolivian military, with assistance from the CIA, located Guevara and his small group of guerrillas. Guevara was apprehended and killed on October 9th. Two days later, Walt Whitman Rostow, then Adviser on National Security Affairs, conveyed to US President Johnson that the capture of Guevara 'shows the soundness of our 'preventive medicine' assistance to countries facing incipient insurgency — it was the Bolivian 2nd Ranger Battalion, trained by our Green Berets from June-September of this year, that cornered him down.'[7]

The Alliance for Progress financed diverse projects in Bolivia, encompassing infrastructure development, access to clean

6 Rabe, *The Killing Zone*, 80-5; Westad, *The Global Cold War*, 178-9.
7 Johnson Library, National Security File, Country File, Bolivia, Vol. IV, Memorandum, January 1966–December 1968.

drinking water, educational initiatives, and the contentious Triangular Plan involving 'mining rehabilitation'.[8] Regarding housing, the projects under examination in this research received three loans from the IDB and USAID. The initial loan was granted during Estenssoro's administration, and the second loan aligned with Barrientos' era, with USAID supporting a private venture. However, it was during the dictatorship of Hugo Banzer, extending into the 1970s, that a significant number of housing projects funded by these resources were inaugurated.

IDB and USAID housing intervention in Bolivia

From 1957 to 1964, the National Housing Institute (INV) built 836 houses, averaging 105 yearly. However, housing productivity significantly increased from 1964 to 1973 when the National Housing Council (CONAVI) took over. CONAVI managed to construct 7,249 houses, averaging 725 houses per year.[9] This sevenfold increase in productivity was primarily attributed to the two loans totalling $9.5 million the Bolivian government received from the IDB starting in 1963. The transition from INV to CONAVI was not a coincidence, as it was part of the restructuring process mandated by the IDB.

As a condition for the first loan, the Bolivian government had to reform its national housing institution. In addition to the loan, the IDB provided a non-repayable grant of $150,000 to offer technical assistance for establishing the new institutional framework, which eventually led to the creation of CONAVI.[10] In addition, the IDB and the USAID also played a role in supporting the establishment of Savings and Loan associations in Bolivia.

8 Field, *From Development*, 10-38.

9 Ministerio de Obras Públicas, Servicios y Vivienda, 'Bolivia: 60 años de planes de vivienda social' (MOPSV, 2020), 6,8; Walter Murillo, *Aspectos de Vivienda y Marginalidad* (La Paz, 1975), 41, Aspectos de Vivienda y Marginalidad - La Paz - 1975 - 169.411 A, Folder ID 1095851, ISAD(G) Reference Code WB IBRD/IDA LAC, World Bank Group Archives, Washington DC, US (hereafter designated as WB).

10 IDB, 'Non-Reimbursable Technical Assistance to the Corporación Boliviana de Fomento (CBF) for Housing', Plan of Operation (Washington, DC: IDB, March 1963).

The first Savings and Loan association, La Primera [The First], was founded in 1964 by Bolivian Ernesto Wende, who studied in the US before returning to Bolivia. Wende later became the first president of Caja Central, which was established in 1966 based on the advice provided by the IDB and USAID. Hogares Bolivianos, a subsidiary of the US company World Homes, received a million-dollar Cooley Loan administered by USAID to construct the San Miguel middle-income neighbourhood in La Paz. The San Miguel project was managed by La Primera, which was associated with Caja Central.[11]

Despite the construction of 7,249 houses by CONAVI and additional projects such as the 450 houses in San Miguel, it was evident that these efforts were insufficient to address Bolivia's housing deficit during the 1960s. The plan was different, as the 1963 loan proposal showed:

> Obviously, the project will not —and is not intended to— solve the urban housing problem in Bolivia, but the very fact that a duly-organized forward step will be taken, may be expected to have contagious effects. This assertion could be considered over-optimistic if the project consisted exclusively of the Government building complete homes to turn over to the beneficiaries (...) the creation of the National Housing Institution —incorporated as a condition of the loan— and the strengthening of existing institutions in the field of housing cooperatives and savings and loan associations, should also provide the necessary institutional mechanism for the country to face squarely its housing problem.[12]

11 Bolivian Delegation, 'El Desarrollo de la vivienda en Bolivia' (Inter-American Housing Congress, Santiago de Chile: Inter-American Federation of the Construction Industry, 1966), 2-7, CEDOC.

12 IDB, 'Loan to the Corporación Boliviana de Fomento (Housing)', Loan proposal (for a project) (Washington, DC: IDB, March 1963), 25.

Charles Abrams' draft report to the Bolivian government a few years earlier, in 1959, was highly critical of both INV and the law that regulated it.[13] Abrams observed that '(n)either its Board of Directors nor its main body of personnel is trained in the new skills required for a sound mortgage credit operation.'[14] He also noted that there was little doubt that the law was 'unrealistic, costly, and unworkable from the start'.[15] He believed that a country 'as poor as Bolivia' could never afford to provide 50% of the cost in capital subsidies and substantial interest subsidies as well. The shortage of housing made him distrustful of the public apparatus, stating that it 'should not be staffed with so many people (...) It should hand out the building contract to a contractor on competitive bidding or to several sub-contractors instead of having 'building experts' on its permanent staff.'[16] These few quotes represent both the harsh tone and the direction of his recommendations.

In 1975, the Bolivian architect Walter Murillo Salcedo, who had worked for both INV and CONAVI, shared some of Abrams' criticisms, whom he had met while in Bolivia. However, he provided a more thoughtful and comprehensive analysis of Bolivian housing institutions, financing, and legislation since 1924.[17] On the role of government institutions, he pointed out that: '(t)he action of these institutions, however, has not reached its full potential for various reasons, including political interference by certain leaders who claim to represent trade unionism, the lack of a state housing policy, the absence of a land policy, financial difficulties, the incipient building industry, the lack of skilled labour in construction, all of which results in the higher cost of housing and the poor use of materials.'[18] Regarding the role of the State, he indicated that this

13 Charles Abrams, 'Report on Housing Financing in Bolivia (Draft)' (New York: United Nations. Technical Assistance Administration, Nov. 1959), 75-83. The English draft version of the report is not the same as the Spanish version.
14 Ibid., 80.
15 Ibid., 79.
16 Ibid., 77-8.
17 Murillo, *Aspectos de Vivienda y Marginalidad*, 1-29.
18 Ibid., 2, translated by author.

'must be the main lever to seriously address the problem, providing the resources through a housing policy coherent with a national planning process in the interests of the entire population.'[19]

One of the main problems identified by Murillo Salcedo in his historical analysis is that the legislation suffered successive changes that have addressed the housing problem in a limited way, sometimes with 'good ideas' but without regulations or stable funding to back them up. Additionally, he highlighted the issue of 'legislator's renewed effort to create or dissolve bodies according to political or trade union pressures, among others'.[20] Further increasing the difficulties described above, INV was also facing a reduction in funding due to the mandatory 50% non-refundable housing levy, as Abrams had pointed out. Furthermore, the unions continued to independently manage housing funds without being accountable to the central institution.[21]

The 1963 IDB report supported Abrams' arguments and echoed some of the points later analysed by Murillo Salcedo concerning the INV. Consequently, the IDB decided not to provide the funds to INV. Instead, they stated that the only institution capable of managing the loan was the Corporación Boliviana de Fomento [Bolivian Development Corporation CBF], even though it was not specifically focused on housing issues.[22] The CBF was established in 1942 to exploit Bolivia's natural resources and improve the agricultural, mining, and industrial sectors of the economy. The report emphasized the need for technical assistance from the IDB, which would benefit a programme and reforms promoted under the Alliance for Progress.[23] The assistance programme was designed to last one year and involved visits by experts in various fields to achieve the following objectives:

19 Ibid., 2, translated by author.
20 Ibid., 19, translated by author.
21 Ibid., 22-3.
22 IDB, 'Technical Assistance', 2-3.
23 Ibid., 1.

a) to assist in the development of a new national housing agency in Bolivia
b) to organise and put into operation housing cooperatives
c) to develop a sound savings and loan program, and
d) to develop a self-help housing program.[24]

In July 1964, in compliance with the loan clause, CONAVI was established to replace INV. Thus, in May 1966, the CBF transferred the management of the IDB fund to CONAVI.[25] This institution initially had a board of directors and two services: financial and technical. Its functions included developing the national urban housing plan, and promoting housing research in collaboration with universities, municipalities, and other public and private national, international, or foreign institutions. CONAVI also aimed to foster the growth of the construction industry and define and qualify 'social housing' and housing developments.[26] However, CONAVI underwent constant revisions, with adjustments as early as 1968, at the request of the second IDB loan. Further revisions occurred in 1970 and 1971 due to the establishment of housing councils such as the mining and oil councils. A major restructuring took place in 1974, leading to its eventual dissolution in 1987.[27]

Furthermore, these institutional challenges at the national level, together with the roles played by local municipalities, may have collectively led to the urban reform of 1954 not fulfilling its projected aspirations. As referred to in the preceding part, on the one hand, Carlos Calvimontes, Bolivia's Undersecretary of Housing in the 1970s, labelled the reform as 'inoperative,' alluding to its restricted impact across the country, aside from La Paz, was limited.[28] On the other hand, Bolivian scholar Álvaro Cuadros highlighted

24 Ibid., 1-2.
25 IDB-CONAVI, 'Informe Final Programa Vivienda BID-CONAVI', Desarrollo Urbano Familias Bajos Ingresos (Washington, DC: IDB, Oct. 1968), 2.
26 Decree Law nº 06916. Government of Bolivia. 3 July 1964.
27 Murillo, *Aspectos de Vivienda y Marginalidad*, 23-4; Julio Mantilla, *Legislación de Vivienda* (La Paz: Los amigos del libro, 1974), 93-125; Ministerio de Obras Públicas, Servicios y Vivienda, 'Bolivia 60 años', 6-8.
28 Carlos Calvimontes Rojas, 'La Reforma de la Propiedad del Suelo Urbano en la Administración de Paz Estensoro', in *Políticas de Desarrollo Urbano y Regional en América Latina*, ed. Jorge E. Hardoy and Guillermo Geisse (Buenos Aires: Ediciones SIAP, 1972), 291,3.

the social significance of the reform in the capital city in his book on the urban growth of La Paz.[29] Specifically, the urban reform facilitated land expropriation in peripheral areas of La Paz and also, as illustrated below, its socially oriented goals paved the way for the expropriation of land in El Alto to build Ciudad Satélite and other housing projects financed by the IDB. These initiatives aimed to promote urban growth for the lower-income population. This aligns with Abrams' identification, during his 1959 mission, of the favourable conditions for urban growth in the capital, which had been experiencing population growth since 1940 and was regulated by the Municipality of La Paz in 1956.

In 1962, Bolivia had a population of 3.9 million, with 63 per cent residing in rural areas. However, the urban population was growing at an annual rate of 3.3 per cent. The urban housing deficit was estimated at 88,700 houses, increasing by an average of 6,000 houses per year. To tackle the housing crisis, the Bolivian government submitted multiple requests in 1961 to the IDB, seeking a total of $20 million. Following an IDB mission in 1962, a loan of $4 million was considered. Recognizing the significance of housing as a social priority in Bolivia's Economic and Social Development Plan for 1962-1971, the Committee of Nine was able to grant funds from the Alliance for Progress.[30]

Eventually, the IDB approved an initial loan of $4.5 million in 1963, followed by a second loan of $5 million in 1967, which concluded in the early 1970s. Alongside the requirement for institutional restructuring of housing, the loans stipulated that only housing for private ownership —not rental housing— would be financed. The urban design and architecture of the houses would be executed locally, but the plans would undergo review and approval by IDB technical experts to reduce costs and adhere to SPTF housing project criteria.[31]

29 Alvaro Cuadros, *La Paz* (La Paz: Facultad de Arquitectura, Urbanismo y Artes, Universidad Mayor de San Andrés, 2002), 148-9.
30 IDB, 'First Loan', 3,8,22-4.
31 Ibid., 6,20.

Fig.162 Location of housing projects funded by IDB's first loan in Bolivia. Source: IDB-CONAVI, 'Informe Final 1968', annex 1.

Under the first IDB loan project, 3,440 housing units were constructed between 1963 and 1968. La Paz accounted for 77 per cent of the projects, followed by Cochabamba (10 per cent), Sucre (6 per cent), and Santa Cruz (3 per cent) —Bolivia's largest cities at the time— which together represented 88 per cent of the urban population.[32] figs.162-5 The majority (79 per cent) of the housing units were single-family houses ranging from 48 to 60 square metres in size, featuring three bedrooms. Another 18 per cent ranged from 40 to 48 square metres and comprised two-bedroom houses.[33] These dimensions were larger than those suggested by Abrams in his earlier recommendations. Only 982 dwellings were constructed through aided self-help, accounting for 29 per cent of the total.[34] According to Murillo Salcedo, this strategy was not without its problems due to the lack of training of local technicians and the unfamiliarity of the beneficiaries with the system, who were 'used to the paternalism

32 Murillo, *Aspectos de Vivienda y Marginalidad*, 31; IDB-CONAVI, 'Informe Final 1968', 18.
33 Murillo, *Aspectos de Vivienda y Marginalidad*, 33.
34 IDB-CONAVI, 'Informe Final 1968', 4.

Figs.163-5 Housing projects funded by IDB's first loan in Bolivia. (top) USAID visiting housing project in El Alto. Sources: Newspaper El Diario, December 2, 1965. (middle and bottom) IDB-CONAVI, 'Informe Final 1968', 23

of the state'.[35] Most of the houses were built for cooperatives and committees, while 100 units were allocated for Savings and Loan associations.[36] The latter served as a pilot project aimed at promoting housing savings in the private sector.[37] The majority of the projects were situated in Ciudad Satélite, El Alto.[fig.166]

The original plan aimed to finance 4,770 housing units, but the number was reduced due to the higher cost of construction materials and the allocation of funds for community facilities.[38] Although the reports for the first loan emphasised that neighbourhoods with facilities would be built, no funds were initially allocated for this, so CONAVI made on-site modifications to cover these costs.[39] However, for the second loan, provisions were made to include facilities, resulting in the construction of six health centres, eleven schools, and two markets.[40]

The loans primarily targeted low-income families as beneficiaries, except for the Savings and Loan houses, which were intended for higher-income families. The IDB expressed an interest in integrating more affluent housing into the neighbourhoods, which another institution would finance.[41] Previous reports had cautioned that union members were likely to conduct surveys to select homeowners, but efforts should be made to include non-union people.[42] In the first loan, the majority of beneficiaries were from the working class, with 31% from the public sector, followed by 18% from mining, and 9% from industry, among others.[43]

Under the second loan project, 3,776 houses were built between 1967 and 1973. La Paz accounted for 46% of the houses, with Santa Cruz contributing 13.5%. The main beneficiaries in-

35 Murillo, *Aspectos de Vivienda y Marginalidad*, 34, translated by author.
36 IDB-CONAVI, 'Informe Final 1968', 4.
37 IDB, 'Loan to the CBF', 43,47.
38 IDB-CONAVI, 'Informe Final 1968', 6.
39 IDB, 'Loan to the CBF', 55.
40 IDB-CONAVI, 'Informe final del préstamo al Consejo Nacional de la Vivienda (CONAVI)' (Washington, DC. IDB, June 1974), 12.
41 IDB, 'Loan to the CBF', 2.
42 Ibid., 12.
43 Murillo, *Aspectos de Vivienda y Marginalidad*, 32.

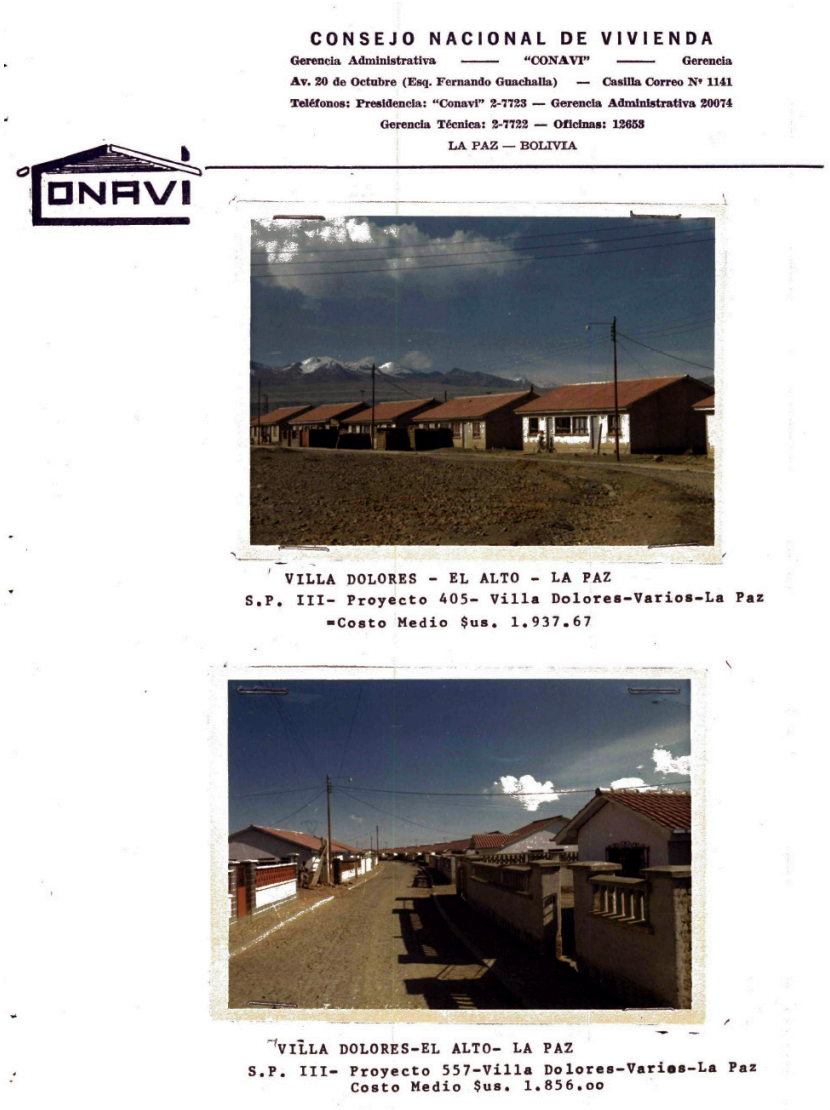


Fig.166 IDB funded housing projects in Ciudad Satélite –called Villa Dolores project at that time. Source: IDB-CONAVI, 'Informe Final 1968', 24.

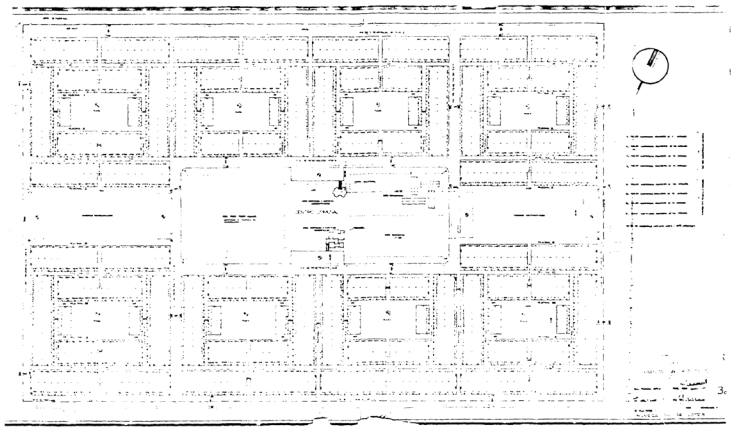


Fig.167 IDB Río Seco aided self-help housing project. Source: IDB, 'Informe Final 1974', 92.

cluded 20% from the manufacturing sector, 18% from the railways, 14% from the teachers' union, and 12% from the government.[44] The projects provided loans directly to beneficiary families, with repayment periods ranging from 10 to 25 years, depending on the age of the beneficiary. Repayment amounts were not to exceed 25% of the beneficiary's income.[45]

Once again, a significant number of houses were built in El Alto, primarily in Ciudad Satélite, with additional projects in the first phase of the Río Seco project. The latter project focused on aided self-help housing.[fig.167] Only the two blocks to the north-east were constructed, while the remaining blocks underwent a redesign and continued development in the 1970s and 1980s through a Sites and Services project funded by the World Bank, as will be explored in the third part of this dissertation.

44 Ibid., 39.
45 Ibid., 38.

Ciudad Satélite in El Alto

El Alto [The Heights] located in the Bolivian highlands at an elevation of 4,000 metres above sea level, is the highest city in the world. Its challenging environment goes beyond the lack of oxygen, with arid conditions, sparse vegetation, low temperatures, and dusty winds. While the nearby city of La Paz was founded during the Spanish conquest in 1548 in a valley, significant migration to El Alto occurred much later, primarily in the 1930s after the Chaco War and in 1952 after the Bolivian Revolution. Over time, El Alto gradually became an urban extension of La Paz until experiencing a major urban expansion in the mid-1980s. In 1985, El Alto was officially designated as a city and now boasts nearly a million inhabitants, surpassing its neighbouring city, La Paz, in population size.

Ciudad Satélite, the first planned and designed neighbourhood in El Alto, introduced a new urban design that reshaped the existing urban fabric of the area. As previously mentioned, this sector received the largest share of housing financed by the Alliance for Progress. Through the first IDB loan, 2,646 houses were financed in La Paz, with 1,864 located in Villa Dolores, representing 70% of the total number of houses built in Ciudad Satélite.[46] This development strengthened the urban growth pole for the working class by creating a suburban district. Construction of the first phase began in 1964 on the barren and sparsely populated land of El Alto.[fig.168]

The streets of neighbourhood unit 561 in Ciudad Satélite followed the steep geography that separated it from La Paz. Construction continues on available land to the southwest of the neighbourhood. To the east, the last houses were built high on the slopes of the La Paz valley. Scattered buildings corresponding to the former Villa Dolores estate were located to the north. In con-

46 IDB-CONAVI, 'Informe Final 1968', 19.

Fig.168 Ciudad Satélite first stage (Plan 561) in El Alto circa1964. Source: Servicio Nacional de Aerofotogrametría , Bolivia.

Fig.169 Villa Dolores original urban plan. Ciudad Satélite site and first neighbourhood units are marked in red. Source: Archive of the Ministry of Public Works, Services and Housing, Bolivia (hereafter designated MOPSV).

trast to the regularity of Ciudad Satélite, Villa Dolores featured plots of various sizes with houses and buildings arranged differently within each plot —some at the front, perimeter, or back, allowing for internal gardens. Likely, some of these plots were still used for housing livestock. The key urban design difference between Ciudad Satélite and Villa Dolores lies in the block structure that organizes the area.

Villa Dolores was the first urban development in El Alto. It was founded in 1942 by Bolivian Julio Téllez Reyes, who owned the land with others from Vicente Tejada. Unlike Ciudad Satélite, which was a comprehensive neighbourhood planned and managed by the government at once, Dolores was built little by little, plot

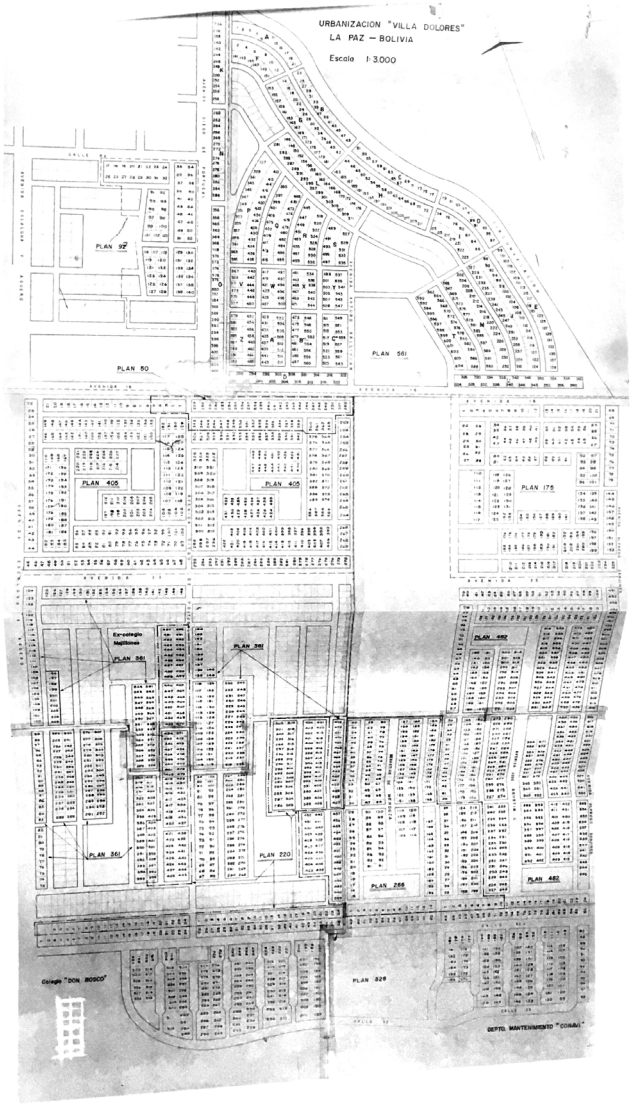


Fig.170 The urban design features a central area allocated for public spaces and community facilities. Ciudad Satélite comprises various distinct neighborhoods, each referred to as 'plan' followed by a number. Source: MOPSV.

by plot, by each owner, following a proposed urban structure. The urban plan of Villa Dolores, drawn up by engineer Emilio Téllez Ross, consisted of square blocks measuring around 80 by 80 metres, following a chessboard-like pattern similar to Spanish colonial city foundations during the conquest.[fig.169] The areas adjacent to the airport up to what is now Cívica Avenue to the east were developed according to this plan. On the drawing, the red markings represent the different neighbourhood units of Ciudad Satélite that were financed by the IDB loans. In 1956, the La Paz City Council designated the El Alto area for preferential commercial, industrial, and single and two-family dwelling use. While El Alto became a suburb of La Paz in the early 1960s, its expansion was hindered by the lack of basic infrastructure, facilities, and transportation.[47]

On January 14, 1964, the land of the future Ciudad Satélite, spanning an area of 831,728 square metres in Villa Dolores, owned by the Tejada Ramírez family, was expropriated. In accordance with the national housing policy outlined in the country's Economic and Social Development Plan, the land was declared public utility land for the construction of working class housing.[48] The red line on Villa Dolores urban drawing indicates the approximate expropriated area. The Ciudad Satélite project was implemented along the streets that formed the square blocks of the original plan drawn by engineer Téllez. However, as seen in the 1964 aerial photograph, the urban design of Ciudad Satélite only maintained the perimeter streets while breaking up the grid of square blocks through sites that followed a logic of spatial efficiency. This, along with the smaller internal streets, reflects the evolving ideas of neighbourhood units.

The urban design of Ciudad Satélite revolved around fourteen neighbourhood units of varying sizes, labelled as 'Plan' followed by a number indicating the number of dwellings in that particular plan.[fig.170] Thus, Plan 561 had the largest number of

47 Gobierno Municipal de El Alto, *Perspectivas del Medio Ambiente Urbano: GEO El Alto* (El Alto: Programa de las Naciones Unidas para el Medio Ambiente, 2008), 25.
48 Supreme Decree 6664. Government of Bolivia. 22 Jan. 1964.

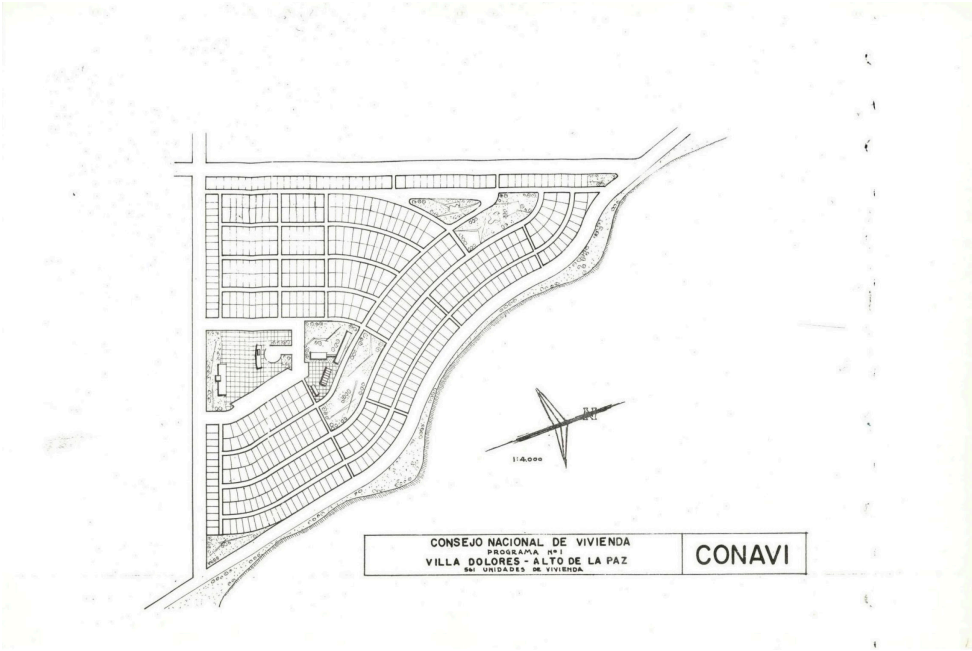
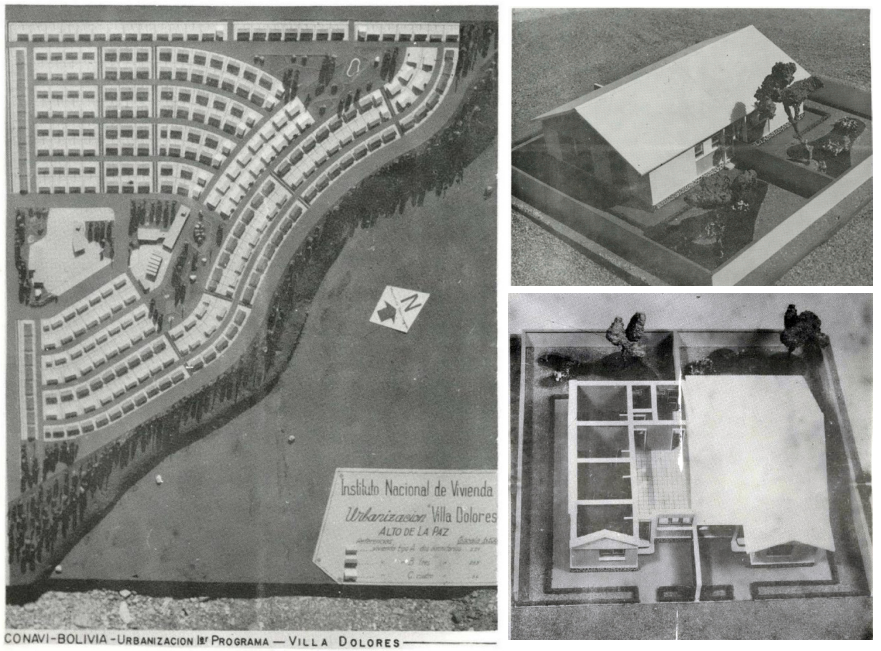


Fig.171 Ciudad Satélite. Plan 561 draft. Source: Murillo Salcedo, *Aspectos*, 95, Aspectos de Vivienda y Marginalidad - La Paz - 1975 - 169.411 A, Folder ID 1095851, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.



Figs.172-4 Ciudad Satélite. Plan 561 models. Source: Murillo Salcedo, *Aspectos*, 92, 97, 98, Aspectos de Vivienda y Marginalidad - La Paz - 1975 - 169.411 A, Folder ID 1095851, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.

dwellings and featured community services and squares in the centre-south and northwest sectors of the neighbourhood unit.[figs.171-2] The perimeter had wide arterial roads, while the inner streets were winding, narrower and interrupted. The different urban layouts in the north, centre, and south of Ciudad Satélite illustrate the varying periods in which the development was designed and constructed.

One of the architects of Ciudad Satélite was the Bolivian Walter Murillo Salcedo, who was mentioned in the first part for his studies at CINVA in 1957, when neighbourhood units were a relevant part of the institution's research, courses, and projects. Murillo Salcedo worked at both INV and CONAVI until the 1970s, holding various positions such as Head of the Planning and Works Department, Head of the Supervision and Control of Works Department and Technical Manager, among others. He was responsible for several housing projects, like Villa Adela and Río Seco, which will be discussed in the third part of this dissertation. Murillo Salcedo also taught courses such as drawing at the School of Architecture at the Universidad Mayor de San Andrés, where he recruited Jaime Murillo Palacios, a young architect who became one of the designers of the Río Seco housing project while working at CONAVI.[49]

The neighbourhood units financed by the first IDB loan, such as Plan 561 and the square superblocks to the north, deviated from the checkerboard structure of the Téllez plan. While the perimeter roads were retained, the plots inside were arranged

49 Jaime Murillo Palacios, interview with the author, 26 April 2022.

Fig.175. Ciudad Satélite in 1966. Source: Newspaper El Diario, April 30, 1966, 12.

in elongated blocks for increased efficiency, and the streets were interrupted, creating space for community facilities and squares in the centre. Around 52% of the housing in these neighbourhoods was built by cooperatives and committees, 43% through aided self-help, and 5% by the La Primera Savings and Loan association.[50] The owners represented a range of incomes, indicating some degree of socio-economic integration in the project. The military junta led by René Barrientos promoted the construction progress of these neighbourhoods through their publicity campaigns by April 1966.[51] fig.175

The neighbourhood units financed by the second IDB loan had a more elongated urban design. They were situated east of the space allocated for the construction of the community cen-

50 IDB-CONAVI, 'Informe Final 1968', annexes, 7, 9, 12.

51 Similar aerial photos and texts were published in the newspapers El Diario, Presencia and Ultima Hora on 30 April 1966.

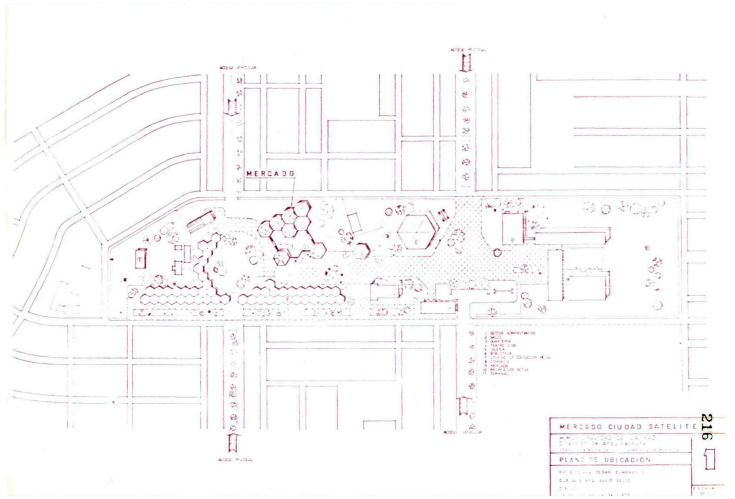


Fig.176. Ciudad Satélite market project (draft). Source: IDB, 'Informe Final 1974', 216.

tre for the entire Ciudad Satélite.[fig.176] The original plans for this area included two schools, a cinema, a church, a market, sports facilities, and squares.[52] During this second phase, the Bolivian architect Alfonso Frías Terán worked critically at CONAVI.[53] Frías Terán studied architecture at the Universidad Mayor de San Andrés and furthered his studies in Seville and at CINVA in 1971. He contributed to numerous public and private projects in Bolivia, including the El Kenko housing estate in El Alto, where he explored superblock designs, the placement of social facilities, and modular housing typologies.[54] Frías Terán analysed some of the designs for the second phase of Ciudad Satélite in his drawings, such as the neighbourhood unit located further south —draft

52 CONAVI, *Centro Comunal - Plan View* (La Paz: CONAVI, n.d.), Archive of the Ministry of Public Works, Services and Housing, Bolivia (hereafter designated MOPSV).

53 Jorge Saravia et al., *Alfonso Frías el Arquitecto: Reflexiones sobre algunas de sus obras, treinta años después, 1981-2011* (La Paz: Quatro Hnos., 2013), 22,201,277,339.

54 Ibid., 118-152.

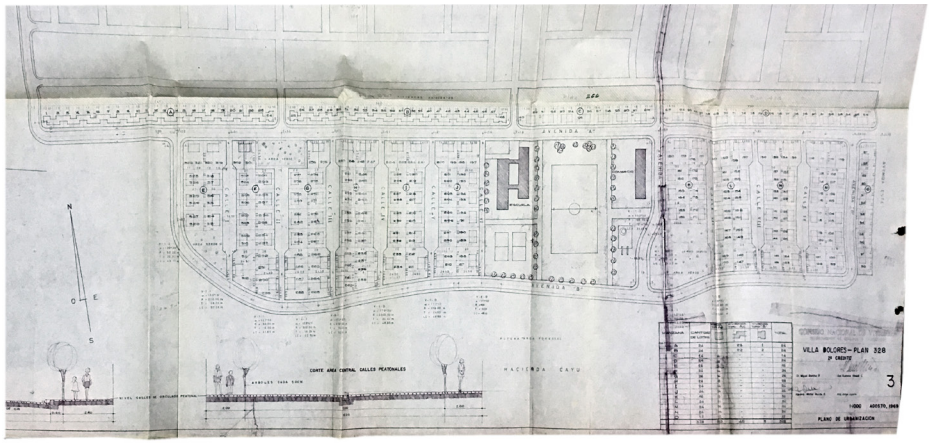
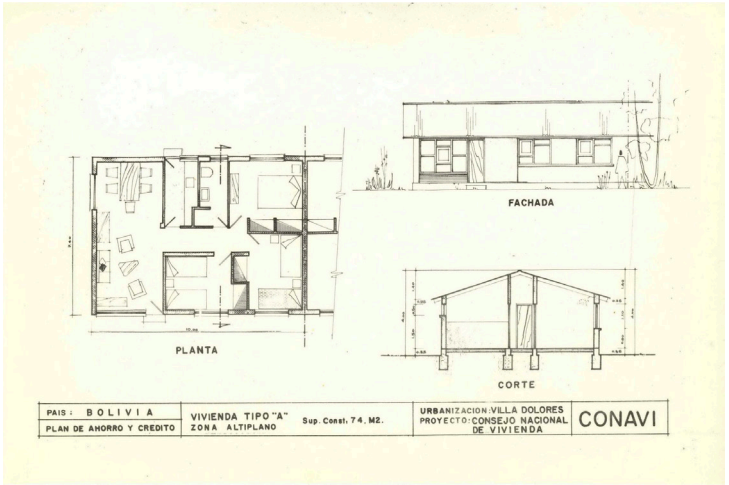
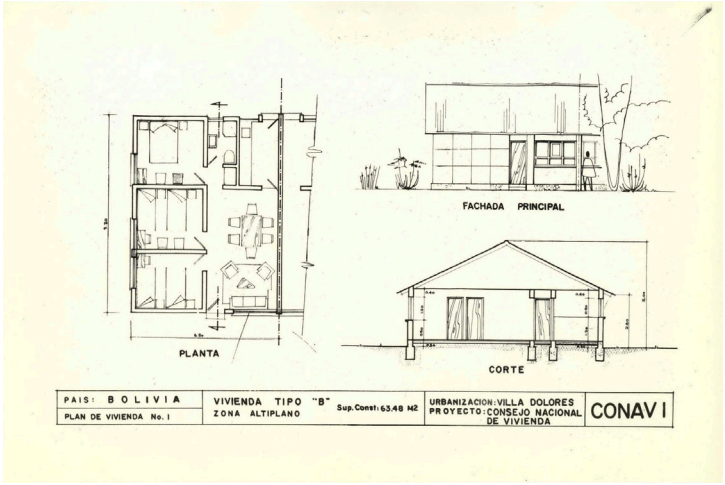


Fig.177 Ciudad Satélite southern neighbourhood unit project. Source: MOPSV.

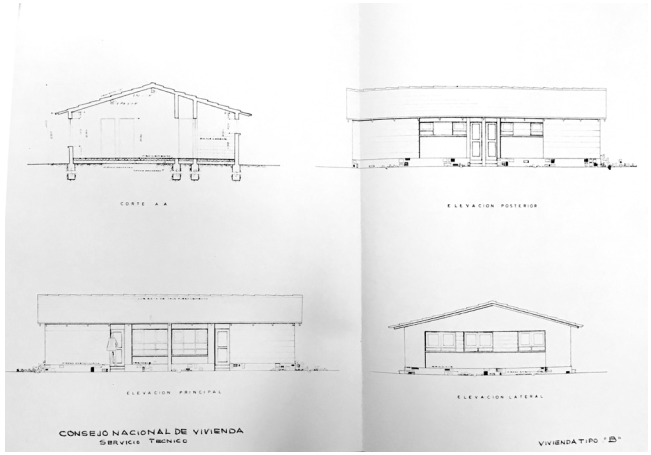
plans signed by Walter Murillo Salcedo.[fig.177] In this elongated neighbourhood unit, the sinuous streets from the northern area were reintroduced, with the facilities positioned in the centre and the dwellings built on the east and west sides. The internal streets had narrow entrances for access control and widened within the block to provide space for neighbours to gather.

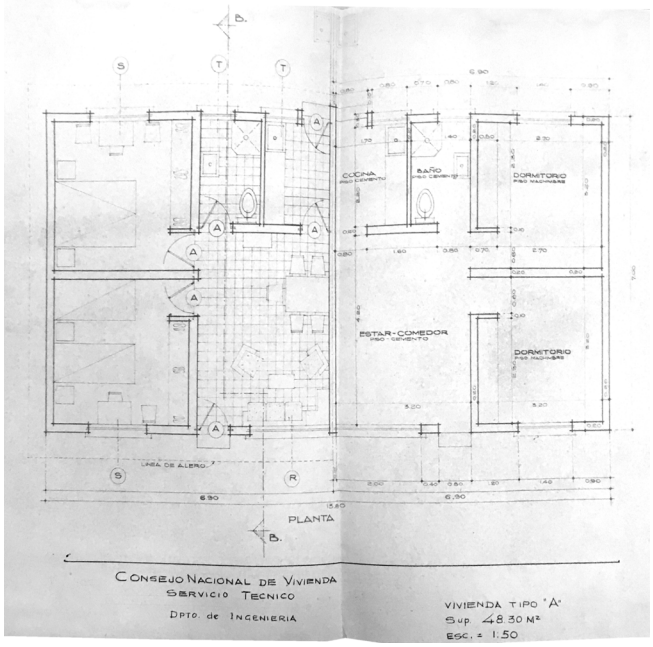
The housing types financed by the two loans in Ciudad Satélite consisted of single-story detached houses with two, three, and up to four bedrooms and a bathroom, kitchen, and living room. The neighbourhoods comprised various housing typologies ranging from 48 to 81 square metres in size. Two houses on two plots shared a dividing wall. The architectural models depicted the concept of a suburban garden neighbourhood, although maintaining lawns and vegetation in the arid environment of El Alto would pose challenges.[figs.172-4,178-84]





Figs.178-9 Ciudad Satélite houses (drafts). Source: Murillo Salcedo, *Aspectos*, 93, 94, Aspectos de Vivienda y Marginalidad - La Paz - 1975 - 169.411 A, Folder ID 1095851, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.





Figs.180-2. (above) Ciudad Satélite houses (drafts). Source: MOPSV. (opposite page) Ciudad Satélite in construction, circa1965. Source: Murillo Salcedo, *Aspectos*, 96, Aspectos de Vivienda y Marginalidad - La Paz - 1975 - 169.411 A, Folder ID 1095851, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.

Although several publications report on the design of a modern model neighbourhood that would have served as a guide for later developments in El Alto, there is not much information on its architectural and urban history.[55] Álvaro Cuadros' book on La Paz provides the most detailed description of the project. Only a brief extract:

> The new neighbourhood, constructed on over 90 hectares of land, had a more structured design compared to previous developments in El Alto [...] Ample spaces were allocated for amenities, making it one of the areas with the best provision of collective spaces in El Alto [...] The housing beneficiaries were contributors to the National Housing Institute, predominantly civil servants [...] The design of Ciudad Satélite served as a model typology, replicated with variations by both the government and private initiatives throughout El Alto, creating an image of suburbia with houses featuring setbacks and front gardens, paved sidewalks and streets, and some community facilities.[56]

55 Gobierno Municipal de El Alto, *GEO El Alto*, 25; Paul van Lindert and Otto Verkoren, 'Segregación residencial y política urbana en La Paz, Bolivia', *Boletín de estudios latinoamericanos y del Caribe*, no. 33 (1982), 134.
56 Cuadros, *La Paz*, 153, translated by author.

EL DIARIO — Domingo 1º de Mayo de 1966 — Página 4

Un grupo de las casas entregadas ayer por Conavi en El Alto a trabajadores de diferentes sectores de actividad.

Acto solemne en Villa Dolores.-

Entregaron ayer primeras 66 de las 561 viviendas de interés social en El Alto

El Alto de La Paz adquirió nueva fisonomía con la urbanización de la denominada "Ciudad Satélite", moderna villa que fue planificada por el Consejo Nacional de Vivienda y que entregó ayer en ceremonia de extraordinario realce, las primeras 66 casas de un grupo de 561 que constituyen la primera etapa del plan nacional de vivienda. La construcción total alcanza a 3.670 viviendas de interés social con el préstamo de 4.000.000 de dólares del BID y 1.500 000 dólares de aportes nacionales.

LA ENTREGA

Especial importancia tuvo la entrega de las 66 casas en Villa Dolares, ya que CONAVI se esmeró en la preparación del acto al cual concurrieron los ministros de Trabajo y Educación, el jefe de la Casa Militar, el comandante de la Fuerza Naval, presidentes y per-

El presidente de Conavi Cnl. Alberto Larrea, entrega sus títulos a una de las beneficiarias con las 66 casas distribuidas ayer.

'CONAVI has practically created a 'city' in the Villa Dolores area of El Alto de la Paz', stated the final report of the first IDB loan.[57] The IDB reports did not refer to the housing projects in the area as 'Ciudad Satélite' until the second loan reports. Despite the original objectives, CONAVI had to find ways to finance both housing and community facilities.[58]

Newspaper articles from El Diario and Presencia on May 1, 1966, the day of Ciudad Satélite's inauguration, described it as a 'modern village' where 'factory workers, civil servants, miners and middle-class people' would reside. The event expressed gratitude to John F. Kennedy, acknowledging him as 'the initiator of the aid we are now receiving', as well as to the national authorities. However, 'those who contributed most to the work from their high managerial and technical positions in CONAVI, such as Walter Murillo and Javier García Agreda, were so modest during the ceremony that they were far from the podium.'[59] fig.183

57 IDB-CONAVI, 'Informe Final 1968', 8, translated by author.
58 Ibid., annex 6.

Página siete

SETENTA FAMILIAS RECIBIERON CASAS EN LA "VILLA DOLORES" DE EL ALTO

Las 561 viviendas de tipo social construidas por el Consejo Nacional de Vivienda comenzaron a ocuparse ayer con el primer grupo de setenta familias que recibieron sus títulos de propiedad de las autoridades del Gobierno nacional y de los representantes de organismos internacionales.

Maestros, obreros y gente de clase media componen el primer grupo de adjudicatarios de las viviendas construidas en el lapso de 17 meses por la empresa constructora Bartos a encargo de CONAVI.

A las 10 de la mañana de ayer, se realizó la ceremonia de entrega de títulos. A ella asistieron varias autoridades: el Ministro de Trabajo, Cnl. Torres; el Ministro de Educación, Cnl. Banzer; el Presidente de CONAVI, My. Alberto Larrea, el Contralmirante de la Fuerza Naval, Horacio Ugarteche, y el Presidente de la Corporación Boliviana de Fomento.

Al abrir el acto, el Presidente de CONAVI dijo que el Gobierno de la Junta Militar está interesado en aliviar el problema habitacional que aqueja al país. Agradeció el financiamiento del Banco Interamericano de Desarrollo que posibilitó la construcción de las viviendas. También agradeció a las entidades nacionales que contribuyeron para la instalación de los servicios con que cuenta actualmente la nueva villa.

Se han construido tres tipos de

Arriba, Monseñor Abel Antezana, Arzobispo de La Paz, bendice las nuevas viviendas entregadas por CONAVI y la Corporación de Fomento, en la zona de Villa Dolores, de El Alto, La Paz. Abajo, una vista parcial de las casas construidas con el financiamiento del Banco Interamericano de Desarrollo.

Figs.183-4. Press clippings showing the delivery of the first houses in Ciudad Satélite in the presence of military and church authorities. Sources: Newspapers *El Diario*, May 1, 1966 and *Presencia*, May 1, 1966.

During the inauguration of Ciudad Satélite, among those seated in the front row were the Archbishop of La Paz, as well as Colonels Juan José Torres and Hugo Banzer, who held positions as Ministers of Labour and Education, respectively, within the military junta led by Alfredo Ovando Candia.[fig.184] A few years later, in 1970, Juan José Torres assumed power after the fall of Ovando but was subsequently ousted by Hugo Banzer in a coup in 1971. Although the IDB housing loans were obtained in the 1960s, it was

59 Newspaper article 'Entregaron ayer primeras 66 de las 561 viviendas de interés social en El Alto', *El Diario*, 1 May 1966, translated by author.

Figs.185-88 (top) Advertisement of housing projects inaugurated during the General Hugo Banzer period (1971-78). Source: Ultima Hora newspaper, July 3, 1974. (opposite page) Ciudad Satélite in 2022. The site has become denser and grown in height. In the bottom image, the few houses remaining in their original state can be seen. Source: Stills from a drone video by Ruddy Quispe, 2022.

during Hugo Banzer's dictatorship in the 1970s that the projects were officially inaugurated, presented as a commitment to the Bolivian people by the General.[fig.185] The third part shows how housing for low-income people continued to be built during Banzer's term, but no longer with IDB funds but through the World Bank.

Today, it is still possible to identify some of the original Ciudad Satélite dwellings, although the neighbourhood has been densifying and transforming over time.[figs.186-8]

The following section describes how, while the IDB financed a development pole for the working-class population in El Alto, USAID supported a middle-class neighbourhood in La Paz.

San Miguel in La Paz valley
'Cada ciudadano propietario de su vivienda'

During an Inter-American Housing Congress held in Chile in 1966, the Bolivian delegation —primarily composed of members from the Bolivian Chamber of Construction— addressed the limitations private companies faced in Bolivia's housing sector. They stressed the high taxes, materials, and labour costs, which hindered private sector involvement. However, the delegation argued that this situation could be reversed by promoting increased individual savings.[60]

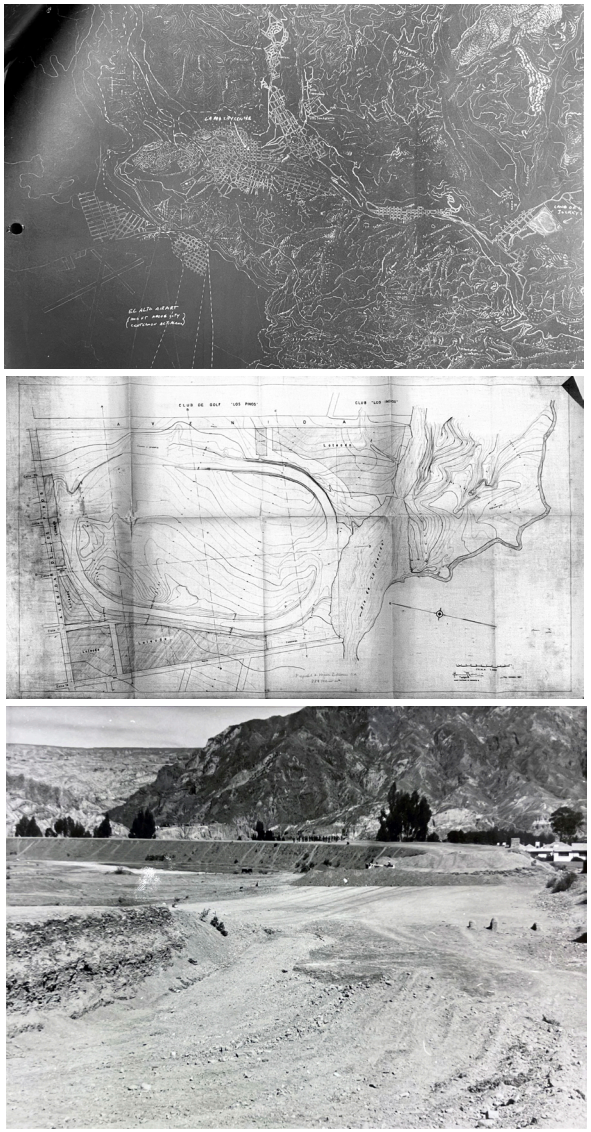
Prior to the congress, there had been a shift in the housing landscape in Bolivia with the introduction of a Savings and Loan system promoted by the IDB and the USAID through housing legislation. The delegation noted that they had to overcome significant obstacles, including government policies at the time that were resistant to the establishment of private financial institutions for housing.[61] As a result, Caja Central was created in 1966, following a process initiated in 1962. The establishment of Caja Central was described as a 'voluntary and selfless contribution to the country's progress.'[62] The delegation acknowledged the technical and economic collaboration provided by the IDB and particularly the USAID, under the framework of the Alliance for Progress, which facilitated the advancements achieved by the Bolivian housing savings and credit system.[63]

Caja Central's initial resources in mid-1966 consisted of members' savings ($232,000), a loan from USAID ($700,000), a loan from the IDB ($100,000), and a another major loan from USAID ($1,000,000) granted through the Cooley Loan to Hogares Bolivianos, a Bolivian-US company led by World Homes. The loan was to construct the San Miguel housing project in La Paz. La Primera, a Savings and Loan association affiliated with Caja Central, managed the project. As mentioned earlier, Ernesto Wende played a key role as the founder of La Primera and the first president of Caja Central when it commenced operations in 1967. Wende also played a significant part in the initial discussions concerning the San Miguel housing project.[64]

World Homes executive Howard Wenzel was exploring the idea of building in neighbouring Bolivia from Peru. In February 1963, he told Alex Furfer, director of USAID Bolivia, that he would soon travel to Bolivia to search for suitable land and local partners.[65] Wenzel had already met with Ernesto Wende in Peru, who was setting up La Primera to finance housing in Bolivia with IDB support. Wenzel also met with executives from W.R. Grace & Co. of New York, who in April offered their Bolivian subsidiary, Grace & Cia [casa Grace], to join the partnership. A few months later, in September of the same year, the Jockey Club of La Paz, another crucial player in the business, joined the partnership by committing to the sale of land.[66]

The San Miguel project was developed on the site of the San Bolivar racecourse in Calacoto, an emerging middle-income neighbourhood on the outskirts of La Paz. Although located ten kilometres from the city centre, the area had good transportation links but was not yet fully urbanized.[fig.189] The land's significant value lay in its size, offering 217,000 square metres, which was challenging to find in the La Paz valley due to restrictions on ac-

60 Bolivian Delegation, 'El Desarrollo de la Vivienda en Bolivia'. The Bolivian delegation was made up of three people from CONAVI, two from the Savings and Loan Association La Primera and ten representatives from the Bolivian Chamber of Construction.
61 Ibid., 2.
62 Ibid., 3, translated by author.
63 Ibid., 3.
64 In a 1966 speech, Ernesto Wende is personally thanked for being the one who 'originated the idea and worked to make the San Miguel project a reality' Quoted in 'Speech on the Inauguration Day of San Miguel' (Hogares Bolivianos, 1966), Box 44, Folder 12, WH. Ernesto Wende and his wife Daisy Urquiola Sarmiento lived and studied in the US. Back in Bolivia, Ernesto Wende worked on the creation of the Savings and Loan system, as well as on the foundation of the Bolivian Stock Exchange. Daisy Urquiola studied at Western Michigan University, following a recognized trajectory through craftsmanship and fashion design in Bolivia.
65 Letter from Howard Wenzel to Alex Furfer, 13 Feb. 1963, Box 1, Folder 2, WH.
66 Howard Wenzel, 'Amendment 'A' Cooley Loan World Homes Incorporated - La Paz, Bolivia' (World Homes, 11 Oct. 1963), 1-2, Box 42, Folder 8, WH.



Figs.189-91 (top) Location of the San Miguel housing project on the right of the map, with downtown La Paz in the centre and El Alto on the left, where the airport is indicated; Ciudad Satélite has not yet been built on this map. (middle and bottom) Topography of the San Miguel site showing the old racecourse and earthworks in the initial phases of housing construction. Source: Box 42, Folder 6; Box 44, Folders 10 and 12, WH.

cessing large tracts of land under single ownership since the urban reform of 1954.[fig.190] Additionally, World Homes' application for the Cooley Loan stated that the private and parochial schools in La Paz were relocating to Calacoto due to its 'better climate and lower altitude'.[67]

Hogares Bolivianos was established in February 1966 after two years of negotiations and exploration of various partnership options, including creating Hogares La Paz. The name Hogares Populares [People's Homes], initially considered, was deemed inappropriate for Calacoto as 'populares' could be misconstrued as 'cheap homes' in that context.[68] Ultimately, Hogares Bolivianos was formed, with World Homes holding a 52% stake, Jockey Club La Paz owning 38% and providing the land, and casa Grace holding a 10% stake. La Primera was entrusted with project administration, including loan approvals, mortgage arrangements, loan repayments from homeowners, and repayment of the Cooley Loan to USAID.[69] Later, in October 1966, Hogares Bolivianos entered into a partnership with local construction company Quiroga Rivas, providing 80% of the capital.[70] This collaboration extended beyond the construction of San Miguel, encompassing other projects such as hospitals, roads, and bridges.[71] Quiroga Rivas was originally formed by engineer Jaime Balderrama, economist Javier Méndez and architect Jorge Prudencio. Prudencio, an architect from the Universidad Mayor de San Andrés who had studied at CINVA in 1960, would later serve as Bolivia's Minister of Housing during J. J. Torres' brief administration in 1970.[72]

67 Ibid., attachments 1.
68 Letter from Howard Wenzel to Floyd Baird, 10 Oct. 1963, Box 39, Folder 5, WH.
69 USAID/Bolivia, 'San Miguel Housing Project Cooley Loans', Audit (Washington, DC: USAID, 14 March 1977), 1.
70 Theodore Atha, 'Annual Report' (Hogares Bolivianos, 17 Feb. 1967), Box 43, Folder 13, WH; IPE, 'Informe Especial: Hogares Bolivianos S.A.', 8 Jan. 1968, Box 43, Folder 13, WH.
71 Quiroga Rivas, 'Contract between Quiroga Rivas and Hogares Bolivianos', 1 Oct. 1966, Box 42, Folder 19, WH; Quiroga Rivas, 'Project Analysis', 12 Sept. 1966, Box 4, Folder 3, WH.
72 Quiroga Rivas, 'Project Analysis'.

The application for USAID PL480 funding for the San Miguel project was submitted in March 1963, with a subsequent application for a Housing Guaranty in May 1964.[73] Bolivian architect Fernando Castillo Navas was initially responsible for the urban design of the project.[74] fig.192 The shape of the racecourse is not so recognisable in his design. His proposal aimed to integrate a neighbourhood unit of 525 dwellings —accommodating approximately 2,600 residents— into the surrounding urban fabric through well-planned streets. The design included a central square, a community centre, and a park to the east. However, this initial plan underwent modifications before the final design was settled.

In August 1964, World Homes in Bolivia hired US architect Theodore V. Atha as the general manager. Atha had previously worked as an architect for Hogares Peruanos in Lima in Leonard Oboler office. He had studied architecture at the Georgia Institute of Technology. He was 35 when he moved to La Paz with his family to assume his new role.[75] Atha's responsibilities at Hogares Bolivianos included managing the design process for the San Miguel project, reviewing and updating the application for USAID funds, and exploring other potential business ventures, such as a housing project in Santa Cruz, the construction of a hotel and apartment buildings in La Paz, and even the construction of the US Embassy.[76]

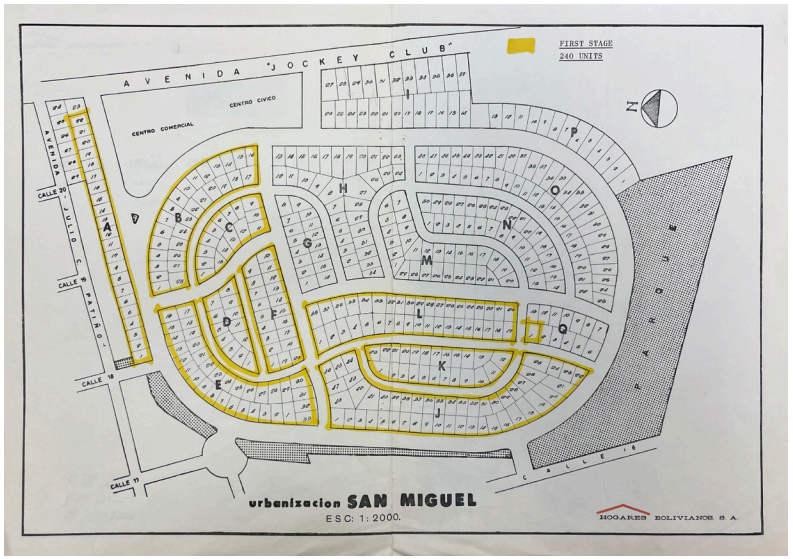
Ted Atha made substantial modifications to Castillo's urban design.fig.193 In Atha's proposal, the racecourse's form is clearly recognizable through the layout of the circulation routes. The project's perimeter only connects to the surrounding urban context at a few entrances. The internal roads follow a winding and

73 World Homes, 'Application for a Loan of Twelve Million Bolivian Pesos of PL-480 Cooley Funds to Agency for International Development', 14 March 1963, Box 42, Folder 7, WH; World Homes, 'Application to AID for Housing Investment Guaranty of One Million Dollar', 1 May 1964, Box 42, Folder 6, WH.

74 Wenzel, 'Amendment 'A'', 3.

75 Hogares Bolivianos, 'Agreement between Hogares Bolivianos and Theodore Atha', Aug. 1964, Box 29, Folder 10, WH; Theodore Atha, 'Curriculum Vitae', 1964, Box 43, Folder 8, WH.

76 Letter from James D. van Pelt to Arthur Nadel, 25 May 1965, Box 45, Folder 11, WH.



Figs.192-3. (top) Fernando Castillo Navas' urban design for the San Miguel neighbourhood unit. Source: Box 43, Folder 11, WH. (bottom) Final urban design for the San Miguel housing project. Sources: Box 44, Folder 10, WH.

interrupted pattern. Juan Carlos Barrientos, a Bolivian architect who worked for Quiroga Rivas during the construction of San Miguel, observed that Atha's design exhibited a more pragmatic approach to resolving the topography, likely influenced by the costly earthworks involved.[77] figs.190-1 Barrientos further notes that: 'the house designs were arranged in rows, as well as those paired by the service yard, to facilitate the excavation for sanitary and rainwater drainage, drinking water connections, as well as electricity connections, one every two houses branching off to the respective metres, placed back to back. These seemingly minimal details resulted in significant savings in labour, materials and other costs'.[78]

Economic considerations did not solely drive Atha's modifications to San Miguel's urban design but were also influenced by local and USAID requirements. Initially, the plan was to sell plots of 160 square metres, but the local municipal authorities prohibited such small plots in the Calacoto area.[79] Additionally, USAID, during the review of the Cooley Loan application, mandated that the neighbourhood unit fulfil community facilities requirements and provide documentation to demonstrate the presence of adequate schools, playgrounds, churches, commercial and transportation facilities to meet the needs of the proposed housing project.[80]

In response to USAID's comments, Ted Atha described the San Miguel project by drawing parallels to FHA housing standards and common urban designs in the US. Among other things, he highlighted that while the cul-de-sacs 'has currently been accepted by various U.S. Government agencies as a valid technique to eliminate through traffic and provide more pleasing spatial relationships through irregular lotting',[81] he opted for loop streets

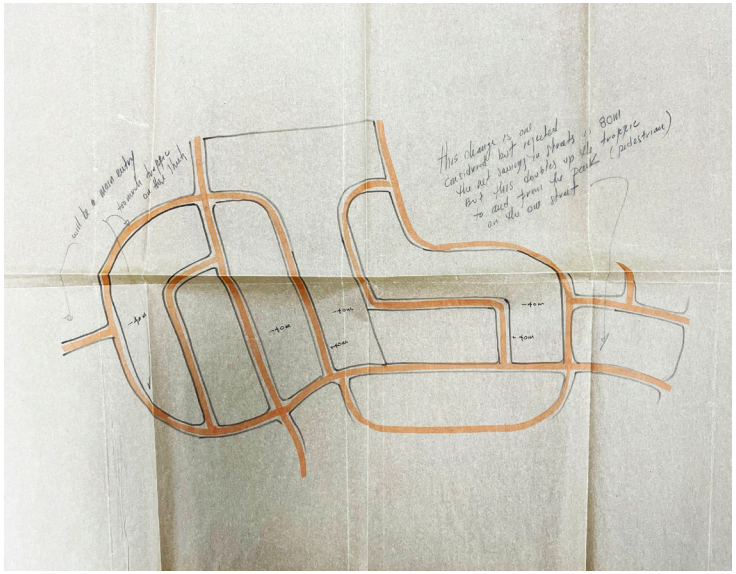
77 Juan Carlos Barrientos joined Quiroga Rivas in 1966 as the Head of the Architecture Workshop, recommended by Jorge Prudencio. A graduate of the Universidad Mayor de San Andrés, Barrientos had also studied at CINVA in 1965. He briefly worked at CONAVI in 1966. Barrientos remained with Quiroga Rivas until the early months of 1970.

78 Juan Carlos Barrientos Mercado, interview with the author, February 2023. Translated by author.

79 Letter from James D. van Pelt to Frank Passuth, 28 Oct. 1964, Box 2, Folder 1, WH.

80 Letter from Frank V. Passuth to J. P. Sullivan, 25 Nov. 1964, Box 39, Folder 6, WH.

81 Theodore Atha, 'General Provisions of Site Plan', 20 Nov. 1964, 2, Box 43, Folder 10, WH.



Figs.194. Streets studies for San Miiguel neighbourhod unit. Source: Box 43, Folder 11, WH.

with T-junctions, which offered the advantages of cul-de-sacs with fewer drawbacks.[fig.194] This design choice proved to be more efficient for garbage collection, utility services, and controlling surface water by reducing the need for storm drains. Atha's proposal also included a list of churches and schools in the area, suggesting the addition of a nursery school to the civic centre.[82] The shopping centre was not only intended to meet USAID requirements but also to be promoted in newspapers as a modern attraction for the entire city, with the claim that 'La Paz will have the first shopping centre in the Republic'[83] fig.195

82 Ibid.

83 Hogares Bolivianos, 'Shopping Centre - Project Outline', 1967, Box 43, Folder 10, WH, translated by author.

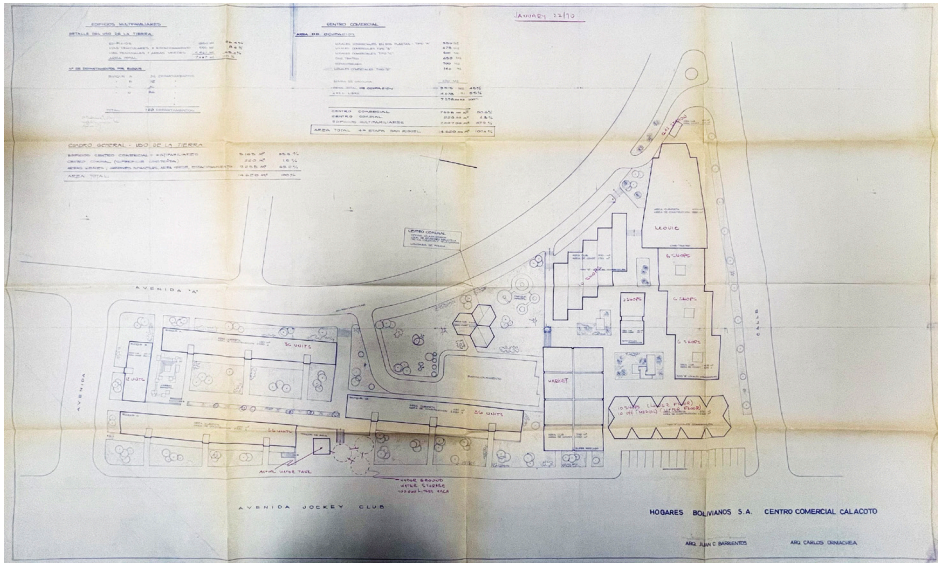


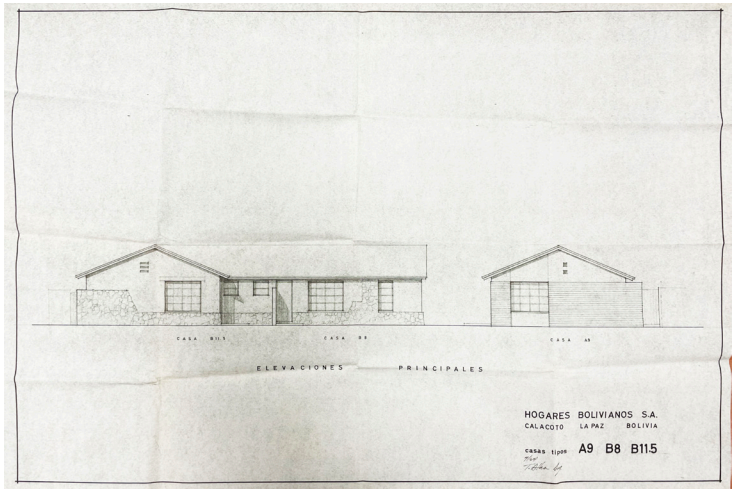
Fig.195. San Miguel shopping centre (draft). Source: Box 43, Folder 11, WH.

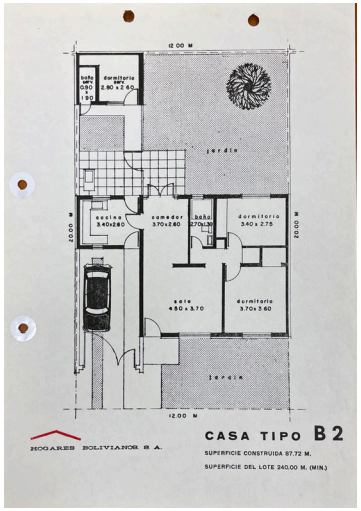
The designs for the approximately 450 houses in San Miguel showcased many variations while maintaining the concept of single-story detached houses.[figs.196-8] Options were considered for two, three, and even four bedrooms, featuring a bathroom, living room, dining room, and kitchen, with sizes ranging from 66 to 92 square metres.[84] The construction was planned to be in brick, allowing for extending the houses to include a second floor. The architectural models depicted a garden neighbourhood layout, with both front and back yards, resembling the houses proposed for Ciudad Satélite during the same period.[figs.199-200]

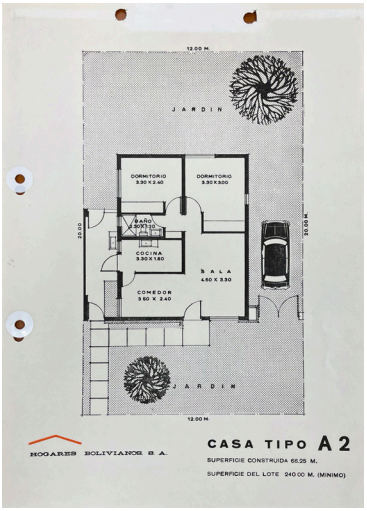
Regarding the interiors, a press release indicated a departure from the 'old-style furniture', characterized by 'large sideboards, and three-piece wardrobes'. Instead, the focus shifted towards 'light, refined, and modern furniture that would fulfil the functional requirements of the dwellings'.[85] [figs.201-2]

84 According to Juan Carlos Barrientos, there is a possibility that architect Mauricio Galindo was involved in the final design of the houses. However, this assertion could not be confirmed during the research. Barrientos Mercado, interview with the author; Hogares Bolivianos, 'Newsletter San Miguel Project', n.d., Box 43, Folder 10, WH.

85 Newspaper article 'El Crecimiento Urbano de La Ciudad', *El Diario*, 23 April 1967, translated by author.







Figs.196-8. San Miguel houses (drafts). Source: Box 43, Folder 11, WH.

Figs.199-203 San Miguel housing models, and furniture. (bottom) First family in San Miguel housing project. Sources: Box 44, Folder 12; Box 94, Folder 14, WH.

Figs.204 General Alfredo Ovando Candia, the President of Bolivia, examines one of the housing plans for the San Miguel project, together with Irving Tragen, USAID Director, and General Armando Escobar, Mayor of La Paz. The headline reads '1 million dollar credit agreement signed to build middle-class housing.' Source: newspaper Presencia, 8 March 1966.

In March 1966, after two years of waiting, an agreement was signed between Hogares Bolivianos and USAID to access the Cooley Loan in the office of the President of the Military Junta, General Alfredo Ovando.[86] fig.204 Two months later, in May 1966, the foundation stone was laid in the presence of Mayor General Armando Escobar and US Ambassador Douglas Henderson.[87] fig.205 In August of the same year, the model houses were inaugurated with the presence of President General René Barrientos.[88] Figs.206-7

86 Newspaper articles: 'Firmóse Crédito de un Millón de Dólares por 240 Viviendas', *El Diario*, 8 March 1966; USAID, 'Loan Agreement between USAID and Hogares Bolivianos', 1 March 1966, Box 42, Folder 1, WH.
87 Press clipping 'Comenzó la construcción de 240 casas en Hipódromo de Calacoto' and 'Comenzó Ayer La Urbanización 'San Miguel', Calacoto', 1966, Box 44, Folder 12, WH.
88 Hogares Bolivianos, 'Inauguration Ceremony of the Model Homes. Invitation and Schedule.', 3 Sept. 1966, Box 44, Folder 12, WH.

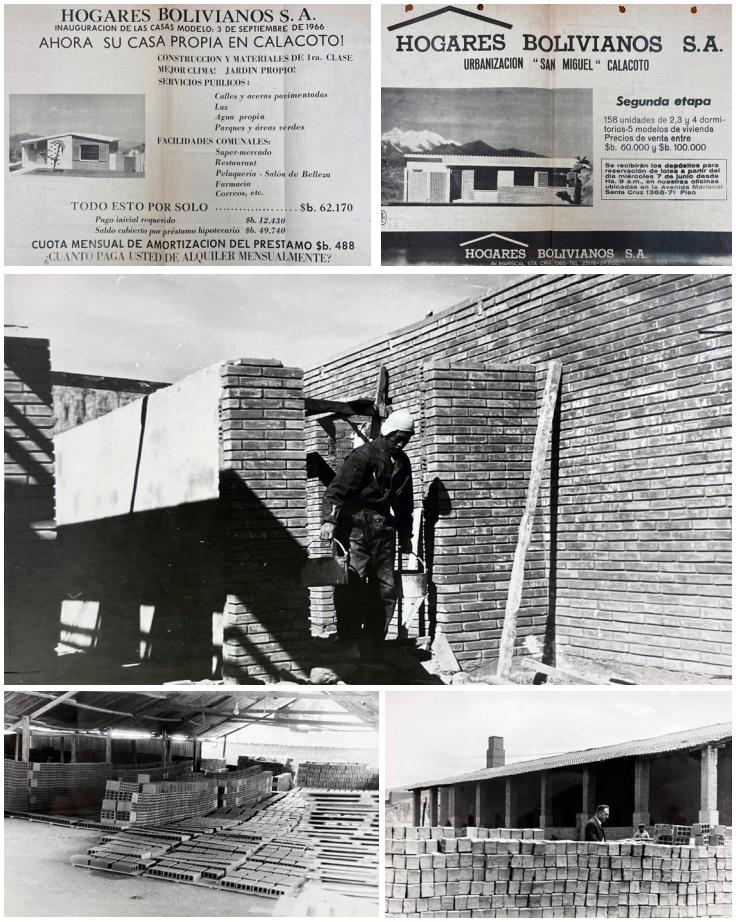
Figs.205-207. (top) San Miguel ground-breaking. (middle) Bolivian President Barrientos raising US flag during the inauguration of the model houses in San Miguel. Source: Box 43, Folder 13, WH. (bottom) San Miguel model houses. It reads 'With a functional and architectural appearance the houses type A2 and type A3 of the modern San Miguel development.' Source: Tribuna Popular, November, 1967.

Fig.208. Pavilion of San Miguel at a housing fair promoted by the Bolivian Ministry of Economy. Source: Box 43, Folder 13, WH

As construction progressed, the houses were marketed through newspaper advertisements and at fairs.[fig.208-10] To purchase a house, a 20% deposit was required, with the remaining amount to be financed through a 19-year mortgage loan at an annual interest rate of 10%.[89] The houses were predominantly sold as planned, with the third phase reportedly selling out 'within ten days and without advertising.'[90] It was specified that all houses were to be sold to buyers intending to use them as residences, and if it was discovered that the buyer had different intentions, such as renting out the property, the sale would be cancelled.[91]

In addition to the two-year delay in signing the agreement with USAID, the development of the San Miguel project encountered several challenges and setbacks. While the difficulties with the electricity supply were anticipated, the issues with water supply came as a surprise.[92] Additionally, the company responsible for

89 IPE, 'Informe Especial: Hogares Bolivianos S.A.', 2.
90 Atha, 'Annual Report', 2.
91 USAID, 'Loan Agreement between USAID and Hogares Bolivianos', exhibit B.
92 Wenzel, 'Amendment "A"', 5; Letter from James D. van Pelt to Milton Drexler, 13 Nov. 1967, Box 44, Folder 5, WH.



Figs.209-13 San Miguel housing project advertisement; construction process and brick factory at San Miguel housing project. Source: Box 44, Folder 12, WH.

supplying 5 million bricks for the entire project only managed to deliver 400,000 bricks over 18 months. To overcome this obstacle, brick machines were imported from Spain and a factory was rented from CONAVI to produce the necessary materials.[93] figs.211-3 Also, certain members of the Jockey Club La Paz expressed their dissatisfaction with the project. Starting from the end of 1967, they voiced their criticisms in newspapers and directly to USAID officials.[94] In addition, in June 1968, James D. van Pelt wrote to the US ambassador in Bolivia, highlighting tensions between USAID officials and World Homes, which hindered their access to other countries in the region.[95]

The years between 1967 and 1969 proved to be critical in terms of administrative and financial challenges, leading to a restructuring of the involved companies. During this period, Thomas R. Hawthorne joined as general manager, and Germán Laverde, who had previous experience in Ciudad Techo, Colombia, became the president of Hogares Bolivianos.[96] As early as February 1969, van Pelt indicated in internal communications that operations in Bolivia were to be scaled back and the assets of Hogares Bolivianos liquidated.[97] Finally, on September 30, 1970, the management contract between Hogares Bolivianos and World Homes was terminated. By that point, the houses had been delivered, but certain project stages, such as the shopping centre, remained unfinished. In addition, the disputes with Jockey Club La Paz were still active.[98]

93 IPE, 'Informe Especial: Hogares Bolivianos S.A.'; van Pelt, 'Letter to Milton Drexler', 13 Nov. 1967; Letter from Javier Méndez to Gonzalo de La Pezuela, Aug. 1967, Box 44, Folder 5, WH.

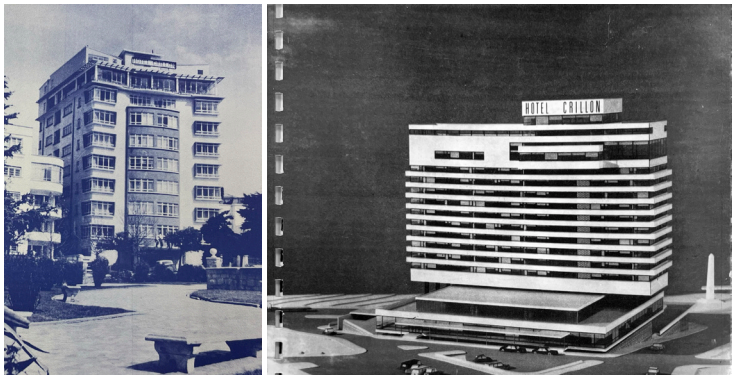
94 Letter from José Luis Cárdenas to Irving Tragen, 29 Jan. 1968, Box 39, Folder 21, WH; Letter from Roger Hard to Theodore Atha, 2 Feb. 1968, Box 39, Folder 14, WH.

95 Letter from James D. van Pelt to Douglas Henderson, US Ambassador in Bolivia, 13 June 1968, Box 4, Folder 12, WH.

96 Hawthorne recounts at length all the work and personal problems he suffered during his time at Hogares Bolivianos, mainly due to financial problems. Some of the letters: Letter from Thomas R. Hawthorn to Rodolfo Salinas, Vice President Latin American Operations, World Homes, 31 July 1969, Box 39, Folder 16, WH; Letter from Thomas R. Hawthorn to Terence McDonald, World Homes, 26 June 1970, Box 5, Folder 4, WH.

97 Letter from James D. van Pelt to Thomas R. Hawthorn, General Manager, Hogares Bolivianos, 2 Feb. 1969, Box 39, Folder 15, WH.

98 Memorandum from Terence McDonald to Board of Directors Hogares Bolivianos, 28 Aug. 1970, Box 44, Folder 17, WH; USAID/Bolivia, 'Audit Report San Miguel'.



Figs.214-5 Previous Hotel Crillón and Schenke, Bodenhofer, Konrad project. Source: Box 45, Folders 16 and 17, WH.

During World Homes' presence in Bolivia, they explored the construction of various projects in different cities, such as small housing projects in Cochabamba and Trinidad.[99] In La Paz, they studied the construction of a new Hotel Crillón. The design was developed in 1967 by architects Guillermo Schenke, Ernesto Bodenhofer, and Kurt Konrad, known for their modern architectural projects in Chile. However, in 1968, World Homes decided not to proceed with the hotel project due to new regulations on foreign investment.[100] figs.214-5

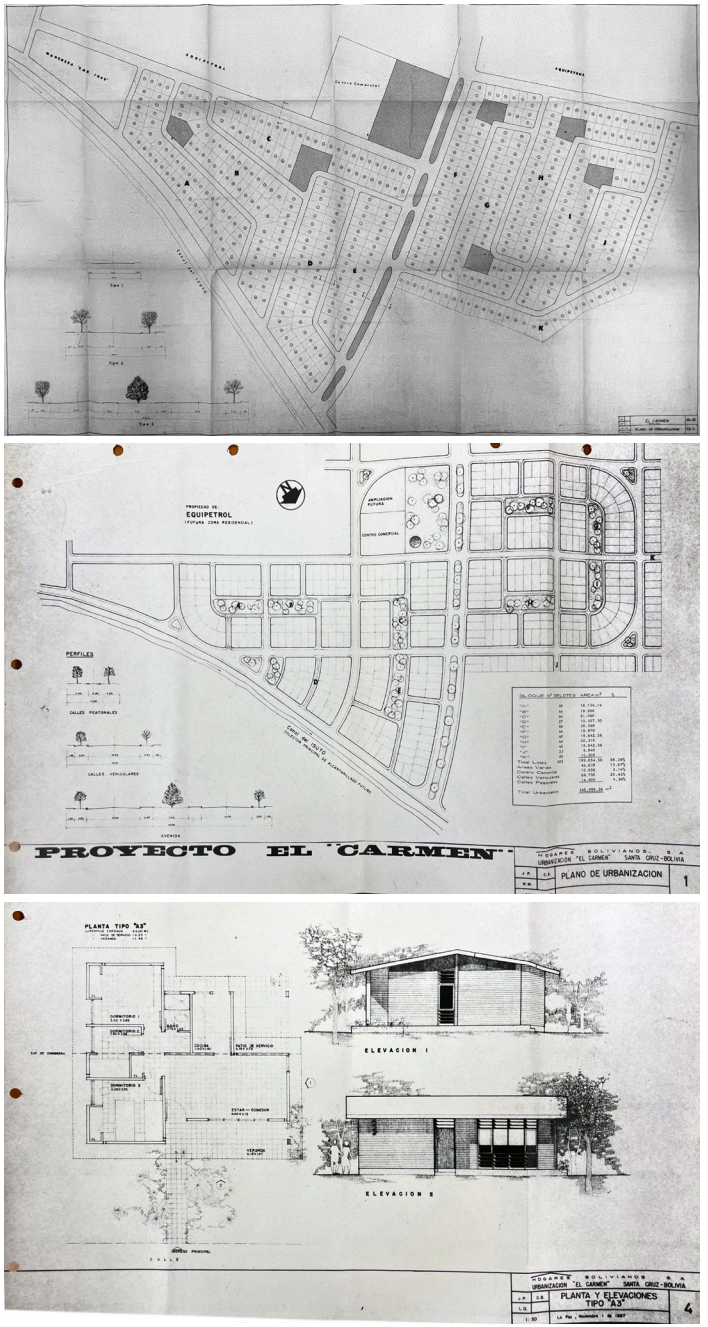
In Santa Cruz, World Homes planned a housing complex called El Carmen on land owned by the Equipetrol company. The project included around 400 detached houses on 300 square metres plots, situated two kilometres from the town centre. El Carmen also incorporated community facilities 'just like San Miguel'.[101] figs.216-8 After three years of effort, by February 1969, it became apparent that making the project financially viable was a challenging task given the prevailing conditions at that time, despite the plans having been reviewed by the FHA and obtaining the USAID housing guarantee.[102] This moment coincided with the World Homes board of directors' decision to gradually diminish its involvement in Bolivia.

99 Atha, 'Annual Report'.

100 Letter from Matthew J. Kust to Ajit Hutheesing, Investment Officer, International Finance Corporation, 15 Feb. 1968, Box 45, Folder 15, WH.

101 Atha, 'Annual Report'; IPE, 'Informe Especial: Hogares Bolivianos S.A.',2; Theodore Atha, 'Application for Housing Investment Guaranty in Latin America under Section 224 - Foreign Assistance Act of 1965 (Revised)', 15 Feb. 1968, Box 42, Folder 1, WH.

102 Letter from Henry C. McDonell, FHA, to Theodore Atha, World Homes, 29 Feb. 1968, Box 42, Folder 1, WH; USAID, 'Housing Guaranty Project #2', 27 September 1967, Box 42, Folder 1, WH; James D. van Pelt, 'Letter to Thomas Hawthorn, General Manager Hogares Bolivianos', 7 Feb. 1969, Box 2, Folder 1, WH.



Figs.216-8 El Carmen housing project in Santa Cruz. Source: Box 45, Folders 8 and 9, WH.

Fig.219 San Miguel in 1970. Photos taken from the water tank. The author merged five individual photographs to compose the panorama. The photographs were not further manipulated. Source: Box 44, Folder 17, WH.

'Abandoning the old 'chessboard' criteria'[103] and 'Dynamic and modern'[104] were some of the terms used in local newspaper articles about the progress of the construction of San Miguel. Despite facing administrative, financial, and political challenges, the San Miguel project continued to move forward, albeit with delays at each stage. The ceremonial handover of the first 22 houses took place in May 1967, and the first phase was inaugurated on January 21, 1969, with President Barrientos in attendance.[105] figs.220,224-9 Finally, on April 27, 1970, the project's completion was celebrated with a final inauguration ceremony on behalf of World Homes.[106] At this point, the school was well underway, and the fourth phase of San Miguel, including a shopping centre and tower blocks, had been approved.[107] figw.219,221-3

103 Newspaper article 'El Crecimiento Urbano de La Ciudad', *El Diario*, 23 April 1967, translated by author.
104 Press clipping 'Obra de Beneficio Social', *Tribuna Popular*, Nov. 1967, translated by author, Box 43, folder 13, WH.
105 Newspaper article 'Fueron entregadas ayer las primeras 22 viviendas de 'Hogares Bolivianos'', *El Diario*, 7 May 1967; 'Entregaron Casas de Interés Social en la Urbanización San Miguel', *El Diario*, 22 Jan, 1969; 'Presidente entregó viviendas en Calacoto', *HOY*, 22 Jan, 1969, Box 39, Folder 18, WH.
106 Memorandum from Thomas R. Hawthorn to Terence McDonald, World Homes, 27 April 1970, Box 5, Folder 3, WH.
107 Memorandum from Thomas R. Hawthorn to Terence McDonald, World Homes, 12 May 1970, Box 5, Folder 2, WH; Memorandum from Germán Laverde to World Homes regarding San Miguel Final Stage, 11 May 1970, Box 5, Folder 2, WH.

Fig.220 The 1967 inauguration of the San Miguel housing project featured the flags of Bolivia and the US, as well as the Alliance for Progress logo displayed on one of the houses. Source: Box 43, Folder 17, WH.

Figs.221-5 (top and middle) San Miguel in 1970 ource: Box 42, Folder 3; Box 44, Folder 17, WH. (bottom) President Barrientos in 1969 San Miguel's inauguration day. Source: Box 39, Folder 18, WH.

Figs.226-9 (top, middle right, and bottom). San Miguel housing stage inauguration in 1967. Source: Box 43, Folder 13, WH. (middle left) Model houses inauguration. Source: newspaper El Diario, April 23, 1967.

Fig.230 San Miguel, 2022. Source: Photomerge by the author using stills from a drone video by Ruddy Quispe, 2022.

The San Miguel housing project played a significant role as a gateway and pilot financing project, driving the urban expansion of the middle and upper socio-economic strata into the valley of La Paz. Today, it is challenging to find the original houses of San Miguel in Calacoto, due to the high level of densification that has taken place in the sector.[fig.230] The urban design still retains the recognisable shape of the old San Bolívar racecourse. Over time, Calacoto has transformed from a residential area into a thriving upscale neighbourhood with one of the highest land values in Bolivia. The integration of the area into the city has been fully realized, including a mix of commercial and office buildings.

This area was one of the first operations in the south-eastward movement of La Paz's wealthy class, achieved through IDB

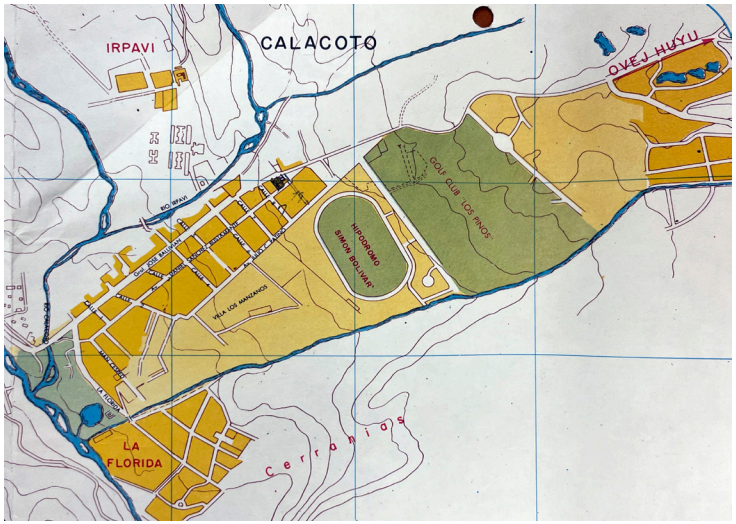


Fig.231 Former Simón Bolívar Racecourse, site of the San Miguel housing project, adjacent to the Los Pinos Golf Club, which was later converted into a housing area. Map of La Paz, 1959. Source: Box 45, Folder 16, WH.

and USAID collaboration with US and local entrepreneurs, investors, and designers. A few years later, in the 1970s, Caja Central, with its partners La Primera and La Paz Savings and Loan associations, continued to expand homeownership in Calacoto with USAID support, this time in collaboration with the construction company ICA.[108] The project aimed to build 3,750 homes for low and middle-income families in apartment blocks on land adjacent to the former racecourse. To facilitate this development, the land of the Los Pinos Golf Club was expropriated, giving rise to the development of the same name.[109] [fig.231]

108 Renner, 'Housing Diplomacy', 304; National Savings and Loan League, AID - Office of Housing - Bolivia Shelter Sector Assessment - Dec. 1976 - 169.399 A70, Folder ID 1093581, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.

109 Supreme Decree No 9929. Government of Bolivia. 29 Sept. 1971.

* * *

In the 1970s, the IDB and the USAID drastically reduced their involvement in housing-oriented lending. As a result, the World Bank assumed the role of supporting economic development through housing, taking on this responsibility in 1972.[110] In the following decade, this text shows how the World Bank played a significant role in strengthening the El Alto area through the implementation of a Sites and Services project in Río Seco and urban improvements in Villa Adela. These projects were designed to target the lowest-income population. Additionally, through a Slum Upgrading strategy, the World Bank aimed to expand homeownership through the regularisation of informal settlements in La Paz hillsides.

110 Renner, 'Housing Diplomacy', 229.

III

World Bank's Sites & Services and Slum Upgrading to eradicate absolute poverty

Introduction

> Historically, violence and civil upheaval are more common in cities than in the countryside. Frustrations that fester among the urban poor are readily exploited by political extremists. If cities do not begin to deal more constructively with poverty, poverty may well begin to deal more destructively with cities.[1]
>
> –Robert McNamara, September 1975
> World Bank President (1968-81)

In the geopolitical landscape of the Cold War, urban poverty in developing nations was framed as a potential trigger for political extremism. Robert McNamara articulated this narrative at an annual meeting of the World Bank's Board of Governors. Serving as the institution's President from 1968 to 1981, and previously known as the architect of the Vietnam War's escalation, McNamara redirected his focus to a global war on poverty. This turning point led integrating housing into the institution's global agenda, targeting the needs of the lowest-income urban populations. To this end, the World Bank's technicians and consultants revisited previous aided self-help housing strategies, leading to the

1 World Bank, *The McNamara Years*, 316.

Fig.1 Homes being upgraded, Lusaka, Zambia c1975. Source: World Bank Group/Edwin G. Huffman.

implementation of revised Sites and Services programmes and the novel Slum Upgrading approach. This part explores the impacts on the built environment, encompassing vernacular architecture, the integration of 'modern' housing, the introduction of new building materials, and the development of neighbourhood units. These developments took various forms, including detached single-family homes and row houses, predominantly on the outskirts of cities in the developing world.[figs.1-3]

This final part of the thesis examines Robert S. McNamara's presidency of the World Bank, a period marked by a focus on the 'eradication of absolute poverty'. The Bank underwent a paradigm shift during his leadership, influenced by the critiques of global development strategies. Economists like Barbara Ward, Mahbub ul Haq, and Hollis B. Chenery were instrumental in reorienting the Bank's approach towards poverty alleviation, em-

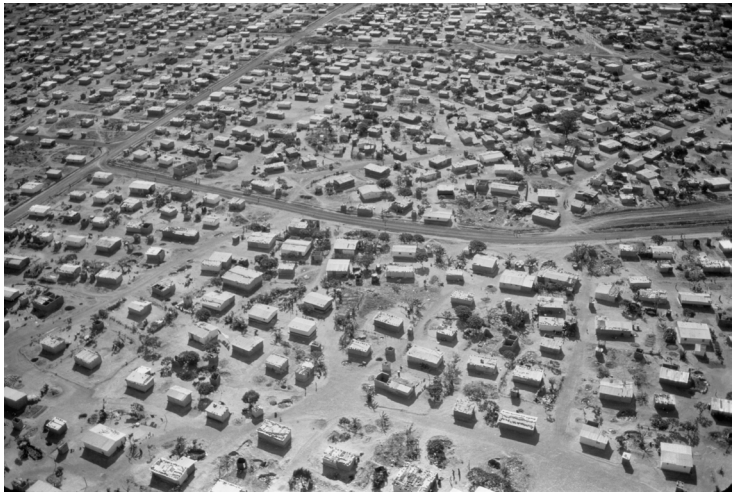


Fig.2 Aerial view of Chawama, Lusaka, Zambia. Lusaka Squatter Upgrading Project (Chawama Compound). Aerial view of Chawama. December 1975. Source: World Bank Group/Edwin G. Huffman.

phasizing basic human needs, environmental consciousness, and addressing inequalities caused by economic growth.

First, this part delves into the World Bank's historical background, tracing its establishment in 1944 with a primary focus on European reconstruction and large-scale infrastructure projects, before transitioning its attention to developing countries. McNamara's tenure saw an increase in funding and expansion of the World Bank's influence in these nations. Additionally, this chapter analyses the governance of the Bank, mainly influenced by the US due to its significant financial contributions.

The second chapter explores the evolution of the World Bank's approach towards urban development, culminating in the establishment of the Urban Projects Department (UPD). Under McNamara's direction, the pressing need to address urban poverty was brought to the forefront, identifying challenges such as insuf-

Fig.3 Sites and Services project: core units built in San Salvador, El Salvador, c1975. Source: World Bank Group/ Jaime Martin Escobal.

ficient access to basic services, inadequate public transport, and prevalent housing issues faced by low-income urban populations. These concerns led to the formulation of housing strategies like the Sites and Services and Slum Upgrading programmes, aimed at providing essential infrastructure and enhancing living conditions in urban settings. The UPD, initially a small team, expanded considerably, collaborating with external experts like the Urban Settlement Design group from MIT.

The subsequent section examines the global expansion of the World Bank's housing operations between 1972 and 1981. Starting with a pilot project in Senegal, these ventures extended to over 150 cities across 35 countries across Latin America, Africa, and Asia. This chapter assesses the architectural and urban design principles underlying these projects, which promoted homeownership through single-family dwellings on individual plots, primarily constructed using aided self-help methods. This approach minimized state intervention and capitalised on market mechanisms, targeting areas often neglected by national and local governments and the private sector. The World Bank's policy promoted private property ownership to encourage investment and self-help in construction. These projects were designed to integrate architectural strategies and urban design principles into the fabric of these regions, expecting local adaptation and replication.

The final chapter centres on the World Bank's urban development endeavours in Bolivia, specifically the implementation of Sites and Services and Slum Upgrading projects in El Alto and La Paz. It traces Bolivia's engagement with the World Bank, noting an increase in loans and diversified projects during General Hugo Banzer's regime from 1971 to 1978, coinciding with the initiation of this housing operation. The urban and slum upgrading projects exceeded initial projections in scale and impact. The Sites and Services projects, like those in Río Seco and Villa Adela, aimed to provide low-income families with homeownership opportunities, reinforcing El Alto as a key area for La Paz's urban expansion. The chapter discusses the World Bank's collaboration with local actors and the importance of community-driven efforts in Bolivia's urban improvement success. It further elaborates on strategies learned at CINVA, including Acción Comunal, and their significance in the implementation of these projects.

1

World Bank's war on absolute poverty 1968-81

> We are asking him [Robert S. McNamara] to attack the root causes of violence and turmoil-poverty, disease, ignorance, and hopelessness (...) In this intensely loyal, brilliant, and good man, America is giving to the world and—if I may be personal—I am giving the world the very best that we have to win the most important war of all.[1]
> —Lyndon B. Johnson. US President 1963-69

In February 1968, US President Lyndon B. Johnson (1963-69) awarded the Medal of Freedom to Robert S. McNamara, following McNamara's tenure as US Secretary of Defence. Initially appointed to this role by John F. Kennedy in 1961, McNamara remained in Johnson's cabinet until 1968, overseeing the escalation of the Vietnam War.[2] In 1964, Johnson had launched a series of domestic initiatives to reduce poverty, colloquially referred to as the 'war on poverty'. In a sense, Johnson's subsequent appointment of McNamara as President of the World Bank in 1968 moved him from a 'militaristic war' to a 'war on poverty', this time on a global scale within the geopolitics of the Cold War.

The decision to place a former US Secretary of Defence at the helm of the World Bank, an institution oriented toward international collaboration, was far from intuitive. It has been suggested that Johnson, following a series of disagreements with

1 Lyndon B. Johnson, *Public Papers of the Presidents of the United States: Lyndon B. Johnson (1968-69)*, vol. Book 2 (Washington DC: US Government Printing Office, 1970), 291.
2 Robert S. McNamara with Brian VanDeMark, *In Retrospect: The Tragedy and Lessons of Vietnam* (New York: Times Books, 1995); Aurélie Basha i Novosejt, *'I Made Mistakes': Robert McNamara's Vietnam War Policy, 1960-1968* (Cambridge: Cambridge University Press, 2019); *The Fog of War: Eleven Lessons from the Life of Robert S. McNamara*, Documentary (Sony Pictures Classics, 2003).

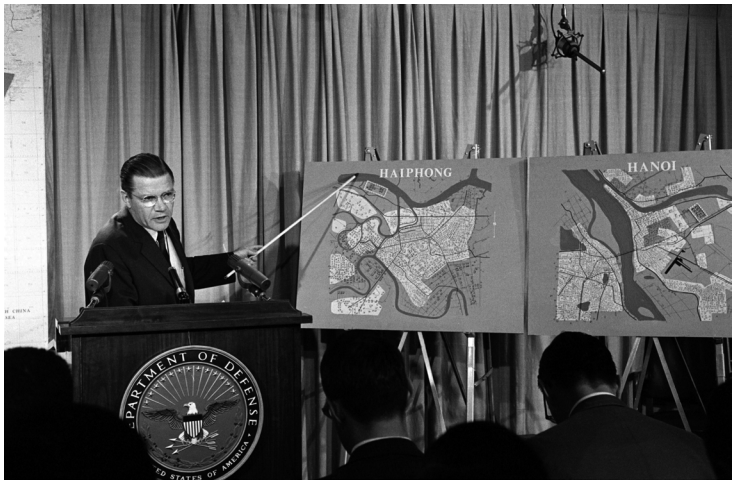


Fig.4 Robert McNamara, US Secretary of Defence (1961-68) during the Vietnam War. Source: Photo 12 / Alamy Stock Photo.

Fig.5 Robert McNamara World Bank President (1968-81) in his office in Washington DC, June 1978. Source: Dennis Brack / Alamy Stock Photo.

McNamara, may have assigned him this role partly to prevent him from speaking publicly on the political matters of the US, including its ongoing foreign policy initiatives such as the Vietnam War —the President of the World Bank cannot speak about the political affairs of the institution's member countries.[3] figs.4-5

Errol Morris, a documentary filmmaker, offered a retrospective on McNamara's multifaceted career in his 2008 film *The Fog of War*.[4] Covering McNamara's academic tenure at Harvard, his contributions as a bombing strategist during World War II, his month-long term as the first non-family President of Ford Motor Company, and his involvement in the Vietnam War, the film marginalizes McNamara's term at the World Bank. The two-hour documentary only devotes thirty seconds to McNamara's thirteen-year leadership of the international institution through a text written on a black background. This omission is consistent with McNamara's own autobiographical account, which focuses heavily on his role in Vietnam and offers only a few words about his years at the World Bank.[5]

Nevertheless, McNamara's tenure in the history of the World Bank is difficult to omit. Multiple publications and official documents recognise his tenure as a turning point in the institution. During his leadership, the World Bank secured increased funding, extended its influence in developing countries, and notably reoriented its goals toward the 'eradication of absolute poverty', a focus on meeting the basic needs of the population. This reorientation was, in part, a response to contemporary criticisms of global development paradigms.

3 Patrick Allan Sharma, *Robert McNamara's Other War: The World Bank and International Development* (Philadelphia: University of Pennsylvania Press, 2017), 25; Novosejt, *I Made Mistakes*, 205-6.
4 *The Fog of War*.
5 McNamara with VanDeMark, *In Retrospect*.

As outlined in the first part of this dissertation, the World Bank was established in 1944 during the Bretton Woods Conference and commenced its operations in 1946. Headquartered in Washington DC, US, the Bank initially included 38 member countries, each making financial contributions. For an extended period, the US was the largest contributor, providing one-third of the organization's funds and consequently wielding more voting power within the institution.[6] Initially, the Bank's primary focus was on rebuilding European cities and fostering economic development. However, following the launch of the Marshall Plan in 1948, the Bank shifted its emphasis towards developing nations.

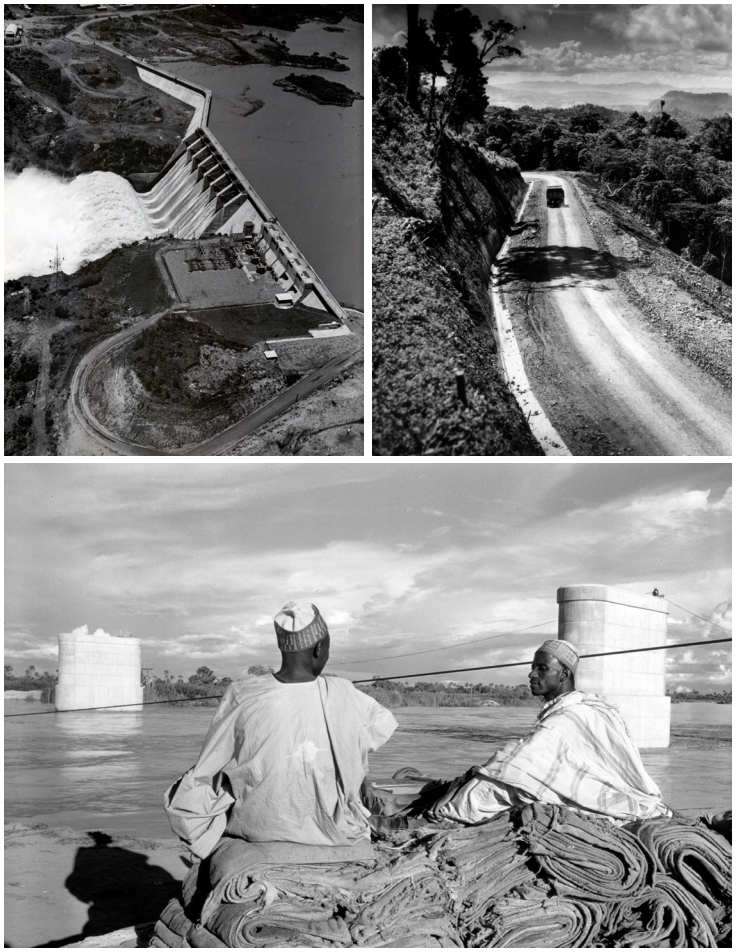
The Bank operates under a Board of Governors, which represents all member countries and convenes annually to establish the year's strategic direction. Day-to-day operations are overseen by a Board of Directors, in which the countries that contribute the most money have the highest representation.[7] This Board scrutinises proposals for loans and development projects and ratifies the appointment of the World Bank President, who has traditionally been a US citizen nominated by the President of the US.[8]

From its inception until the 1960s, the World Bank primarily financed large-scale infrastructure and industrial projects, encompassing dams, hydroelectric facilities, roads, bridges, and railways, among others.[figs.6-8] These projects were aligned with the prevailing development discourse advocating economic growth. The Bank's role involved reviewing and advising on these projects, followed by the provision of low-interest loans to countries capable of demonstrating repayment ability. However, this focus on creditworthiness led to the exclusion of certain nations. To address

6 Sharma, *Robert McNamara's Other War*, 8-9.

7 Principal shareholders, generally economically prosperous nations, have individual representation on the board. In contrast, developing countries share collective representation, potentially diminishing their influence and decision-making power.

8 In 2019, Kristalina Georgieva, a Bulgarian economist, served as the World Bank's Interim President for a brief period, making her both the sole non-US citizen and the only woman to have held this position. The other thirteen presidents have exclusively been US citizens.



Figs.6-8 (top left) Guaybo Dam and Hydroelectric Plant on Lempa River, El Salvador, 1963. The Guayabo Dam and Hydroelectric Plant was constructed with the assistance of a World Bank loan made in 1949. Source: World Bank Group. (top right) Highway construction, Nicaragua, c1953. Source: World Bank Group. (bottom) Beginning of Gongola Bridge, Gongola River, Nigeria, c1961. Source: World Bank Group/John Moss.

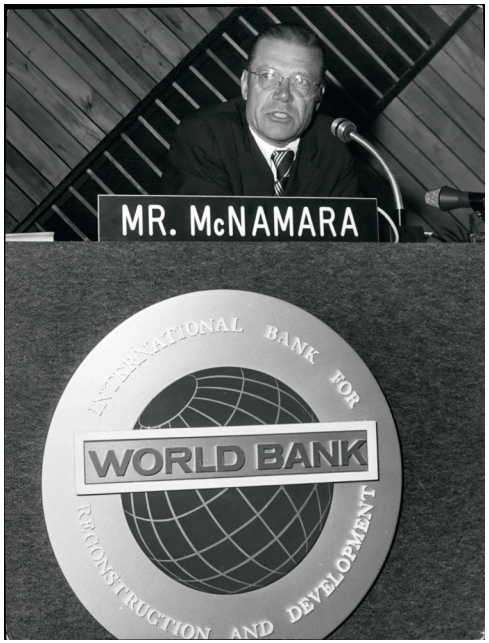


Fig.9 Robert McNamara World Bank President. Source: Keystone Press / Alamy Stock Photo.

this shortfall, the International Development Association (IDA) was established in 1960 as an arm of the World Bank to extend resources to less creditworthy countries. Loan repayment criteria also had a bearing on the types of projects financed; for example, the Bank refrained from involvement in low-cost housing projects until 1972, partly due it was perceived as a social expense rather than a productive investment, and because of the potential difficulties of loan repayment by the beneficiaries.[9]

9 Edward Ramsamy, *World Bank and Urban Development* (New York: Routledge, 2006), 69.

'I have always regarded the World Bank as something more than a Bank, as a Development Agency,' McNamara asserted in his inaugural address to the Board of Governors in September 1968.[10] While acknowledging the shortcomings of global development initiatives in recent decades —particularly the uneven growth that had been achieved[11]— he rhetorically depicted development at the time as 'a confused but sharply disappointing picture, in which it was difficult to see what had gone wrong in the past.'[12] Concerning the World Bank's own role, McNamara commissioned a study led by Lester Pearson, the Nobel Peace Prize laureate of 1957, to scrutinise past aid initiatives and extract lessons for future endeavours.[13] Nonetheless, McNamara was careful to underscore the efficacy of aid, asserting that 'it is not money wasted, it is a sound investment.'[14] He committed to significantly scaling up the World Bank's activities 'taking a lead in development assistance,'[15] a commitment that necessitated a reorientation of the institution's development objectives.

McNamara's remarks were contextualised by the broader critiques directed against developmental discourses prevalent up to the late 1960s, as well as the dependency theory discussed earlier in this dissertation.[16] Responding to these critiques, the World Bank adopted perspectives advocated by economists such as Barbara Ward, Mahbub ul Haq, and Hollis B. Chenery, among others. These economists promoted an approach to global development centred on poverty reduction, a focus on basic human needs, heightened environmental consciousness, and critical analyses of inequality generated by economic growth. Consequently, the World Bank shifted its development paradigms towards what Mc-

10 World Bank, *The McNamara Years*, 3.
11 Ibid., 3-5.
12 Ibid., 5.
13 Ibid.
14 Ibid., 3.
15 Ibid., 15.
16 Latham, *Right Kind of Revolution*, 157-85.

Namara later termed the 'eradication of absolute poverty,' adopting a discourse that integrated 'redistribution with growth.'

Barbara Ward, a British economist, had a long relationship with McNamara dating back to the Kennedy administration. Although not formally affiliated with the World Bank, Ward advised McNamara's and even provided commentary on some of his draft speeches.[17] She was a vigorous proponent of orienting development agendas toward addressing basic human needs, an approach that influenced McNamara's prioritisation of poverty alleviation at the World Bank.[18] Ward also focused on environmental sustainability and urbanisation, themes articulated in her co-authored work, *Only One Earth: The Care and Maintenance of a Small Planet* (1972), and her contributions to the 1976 UN Habitat I conference, as detailed in her publication *The Home of Man*.[19] In the latter she wrote about the pertinence of self-help housing strategies in developing countries, as long as services such as roads, water, drains, electricity, bus lanes and rapid transit railways, education and health, were available, both in the countryside as well as in cities.[20] Her ideas resonated with the World Bank's then-emerging Sites and Services and Slum Upgrading housing initiatives.

In 1970, Ward organised a symposium at Columbia University to critically evaluate the Pearson Commission report, with McNamara in attendance.[21] The symposium highlighted the report's limitations and called for a greater focus on poverty-oriented and environmentally sustainable development policies.[22]

17 Ekbladh, *The Great American Mission*, 253; Lorenzini, *Global Development*, 145; Sharma, *Robert McNamara's Other War*, 57; Ramsamy, *World Bank and Urban Development*, 63-4. Devesh Kapur, John Prior Lewis, and Richard Charles Webb, eds., *The World Bank: Its First Half Century* (Washington DC: World Bank, 1997), 1186; Jean Gartlan, *Barbara Ward: Her Life and Letters* (London: Continuum, 2010), 157-8.

18 Lorenzini, *Global Development*, 143-5.

19 Barbara Ward, *Only One Earth: The Care and Maintenance of a Small Planet* (New York: Norton, 1972); Barbara Ward, *The Home of Man* (New York: Norton, 1976).

20 Ward, *The Home of Man*, 213-233.

21 Ramsamy, *World Bank*, 64; World Bank, *The McNamara Years*, 92.

22 Lorenzini, *Global Development*, 142; Ekbladh, *The Great American Mission*, 246-7; Kapur, Lewis, and Webb, *The World Bank*, 237.

Among the participants was Mahbub ul Haq, a critic of then-prevailing development theories.[23]

Ul Haq, a Pakistani economist, served in a key role at the World Bank as the Director of Policy and Planning. As of April 1970, he became McNamara's 'unofficial poverty activist in the Bank'.[24] Ul Haq had long been critical of development strategies that prioritised industrialisation without yielding broad improvements in living standards.[25] Also, as scholars like Ward, he endorsed targeted interventions to alleviate poverty.[26] His influence was instrumental in the World Bank's shift towards a basic needs paradigm and poverty reduction.[27] Collaborating with economist Hollis Chenery, ul Haq also played a role in integrating concerns about urban poverty into the World Bank's agenda, an area that had only begun to receive institutional attention in the 1970s.[28]

Hollis B. Chenery, a US economist, served as the Vice President of the World Bank from 1972 to 1982. Prior to this role, Chenery contributed to the Marshall Plan and worked at USAID between 1961 and 1965. During this period, he encountered McNamara within the context of the Kennedy administration. Subsequently, he joined academia at Harvard University, continuing his work on development issues.[29] Chenery brought nuanced perspectives to the Bank's existing development paradigms, including those initially advanced by W. W. Rostow —discussed in the second part of this dissertation.[30]

A seminal contribution from Chenery was the 1974 publication, *Redistribution with Growth*.[31] The report argued that despite a decade of rapid economic growth in developing countries,

23 Ekbladh, *The Great American Mission*, 246; Ramsamy, *World Bank*, 64.

24 Kapur, Lewis, and Webb, *The World Bank*, 241.

25 Sharma, *Robert McNamara's Other War*, 58.

26 Lorenzini, *Global Development*, 143.

27 Ibid., 144.

28 Kapur, Lewis, and Webb, *The World Bank*, 263.

29 Juha I. Uitto, 'Hollis B. Chenery (1918-1994)', in *Key Thinkers on Development*, ed. David Simon, 2nd edition (London: Routledge, 2019), 105-11.

30 Uitto, 'Key Thinkers', 108-9

31 Hollis Chenery et al., *Redistribution with Growth* (Oxford: Oxford University Press, 1974)

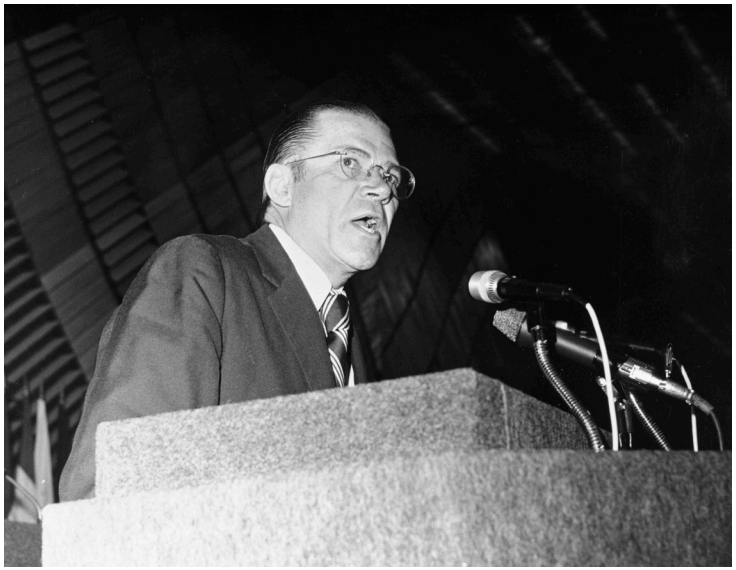


Fig.10 World Bank President Robert S. McNamara Nairobi speech, 24 September 1973. Source: World Bank Group.

approximately one-third of their populations had not experienced tangible benefits. Although the average per capita income in the developing world had risen by 50% since 1960, this growth was distributed unevenly among countries, regions, and socio-economic groups.[32] The publication further contended that while growth was necessary, it was insufficient in addressing poverty due to various systemic obstacles.[33] Among its proposals was a fundamental shift in development strategy to focus on the inadequacies of traditional metrics of social progress.[34] On the topic of urban issues, the report advocated for the extension of basic services to informal settlements, critiquing existing public housing and 'sites and services' strategies for their inability to reach the lowest-income demographics.[35]

32 Chenery et al., *Redistribution*, xiii.
33 Ibid., xv.
34 Ibid., xvii.
35 Ibid., 152.

In 1973, Robert McNamara delivered a pivotal speech to the World Bank's Board of Governors in Nairobi, marking the first such address in Africa. McNamara defined absolute poverty as '...a condition of life so degraded by disease, illiteracy, malnutrition, and squalor as to deny its victims basic human necessities. It is a condition of life suffered by relatively few in the developed nations but by hundreds of millions of the citizens of the developing countries represented in this room'.[36] This was not just another annual speech by McNamara but outlined the World Bank's strategic orientation for the period ahead. While the first five years of McNamara's tenure focused on important institutional issues, the following phase, which involved key collaborators such as Chenery and ul Haq, was devoted to the implementation of the new discourses.

Also in his 1973 address, McNamara articulated critiques such as, 'the growth is not equitably reaching the poor. And the poor are not significantly contributing to growth'.[37] He emphasized the imperative to recalibrate development policies for a more equitable distribution of economic gains.[38] McNamara outlined that this recalibration would necessitate an identification of the most impoverished populations within societies, coupled with an intensive analysis of policies and investments capable of reaching them.[39] One noteworthy emphasis of his 1973 Nairobi speech was the prioritisation of rural poverty alleviation. Then, by 1975, McNamara had also firmly incorporated urban housing into the institution's agenda.[40] Subsequently, the World Bank's development discourse evolved to include revised aided self-help housing schemes, facilitated through the Sites and Services and Slum Upgrading programmes aimed at benefiting the lowest-income populations.

36 World Bank, *The McNamara Years*, 238-9.
37 Ibid., 242.
38 Ibid., 243.
39 Ibid., 244.
40 Ibid., 315-30.

Nevertheless, as Kapur, Lewis, and Webb remind us in their historical account of the World Bank, McNamara's 'war on absolute poverty' was influenced by national security in the context of the Cold War era: 'Security is not military hardware (...) without development there can be no security', McNamara sustained.[41]

During McNamara's tenure, the World Bank underwent substantial expansion in terms of funding, staffing, and the scope of projects and countries supported. In his inaugural 1968 speech, McNamara pledged to the Board of Governors that lending over the subsequent five years would double the lending volume of the previous five years. As a result, loan commitments surged by 131 percent from 1969 to 1973.[42] Additionally, McNamara noted a historic focus on South Asia but stated the Bank's intent to diversify its geographical footprint, targeting more than a twofold increase in investment rates in Latin America and a threefold increase in Africa over the next five years.[43] To facilitate this ambitious plan, the Bank sought to augment its financial resources, partly through government contributions for soft loans and also via the issuance of bonds in global capital markets.[44]

Not only did the number of projects increase during McNamara's tenure, but the types of projects underwent significant changes as well, with a heightened emphasis on education, agriculture, and notably, urban initiatives. Correspondingly, the workforce at the World Bank expanded and diversified. Within the urban sphere, the creation of the Urban Projects Department signalled a nascent focus on city-based issues, marking the inclusion of urban housing in the Bank's loan portfolio for the first time. Edward V. K. Jaycox, one of the department's directors, indicated that it was not a straightforward decision for McNamara to engage with urban issues, given his prevailing interest in rural

41 Robert McNamara quoted in Kapur, Lewis, and Webb, *The World Bank*, 219.
42 Kapur, Lewis, and Webb, *The World Bank*, 216.
43 World Bank, *The McNamara Years*, 8-9.
44 Sharma, *Robert McNamara's Other War*, 31-2.

matters at the time.[45] Nevertheless, the World Bank initiated its first low-cost housing project in Senegal in 1972. By the conclusion of McNamara's administration nine years later, the institution had supported over three hundred aided self-help housing projects across thirty-five developing countries.

McNamara tendered his resignation in June 1980 and formally departed from the institution the following year,[46] coinciding with the inception of US President Ronald Reagan's term (1981–89) and the expansion of the global neoliberal project[47]. Ul Haq and Chenery left the institution shortly thereafter in 1982. Barbara Ward passed away in 1981 at the age of 67. The subsequent era at the World Bank shifted its focus towards private sector-driven development, free markets, and anti-statist initiatives.[48] Consequently, the institution distanced itself from policies centred on basic needs,[49] relegating poverty issues to the periphery, a focus that would not regain prominence until 1987[50].

*

The following sections explores the initial incorporation of urban housing into the World Bank's international agenda. This development was facilitated through the newly established Urban Projects Department and the strategic partnerships it sought to cultivate.

45 Edward V.K. Jaycox, interview by Jochen Krasken and Lou Galambos, 9 March 1995, Oral Histories, World Bank Group Archives.
46 Ramsamy, *World Bank*, 105.
47 David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005).
48 Ramsamy, *World Bank*, 113.
49 Lorenzini, *Global Development*, 163.
50 Kapur, Lewis, and Webb, *The World Bank*, 331-2.

2

World Bank's Urban Projects Department

> In the end, cities exist as an expression of man's attempt to achieve his potential.
> It is poverty that pollutes that promise.
> It is development's task to restore it.[1]
> —Robert McNamara.

Robert McNamara concluded his 1975 address to the World Bank's Board of Governors by delving into cities, poverty, and development. Whereas his 1973 Nairobi speech focused primarily on rural concerns, by 1975, he shifted his focus to urban projects, underscoring them as fundamental in aligning new development strategies with the eradication of absolute poverty. Consequently, in the 1970s, the World Bank integrated issues like urban housing into its global agenda for the first time, taking on responsibilities previously held by organisations such as USAID and IDB.[2] The institution established the Urban Projects Department (UPD) to execute these initiatives. Foundational documents on urbanisation, housing, and transport were prepared to steer the projects of the ensuing decade.[3] The UPD not only leaned on its in-house professionals but also collaborated with external consultants. Among them was the Urban Settlement Design in Developing Countries group (USDP) from the Massachusetts Institute of Technology (MIT). It contributed to research and actively participated in crafting urban projects in developing nations.

1 World Bank, *The McNamara Years*, 333.
2 Renner, 'Housing Diplomacy', 229-33.
3 World Bank, *Urbanization*, Sector Working Paper (Washington DC: World Bank, 1972); World Bank, *Sites and Services Projects* (Washington DC: World Bank Group Publications, 1974); World Bank, *Housing Policy Paper* (Washington DC: World Bank Group Publications, 1975).

From Rural Focus to Urban Projects

In 1973, McNamara stated, 'some of the absolute poor are in urban slums, but the vast bulk of them are in the rural areas. And it is there—in the countryside—that we must confront their poverty'.[4] His words reflected the crossroads the World Bank was facing over whether to increase its work in urban or rural areas. This debate was explored in a publication titled *Urbanization* that the World Bank released in June 1972.[5] The report highlighted one perspective that argued for a focus on job creation and amenity enhancement in the countryside. Such an approach would potentially curb urban migration and subsequently alleviate urban impoverishment. The advantage, as stated, would be cost-efficiency in rural infrastructure development, partly because in rural communities 'lower standards are accepted'.[6] On the other hand, an alternative viewpoint advocated for encouraging rural-urban migration as a means to alleviate rural poverty. The proponents of this view believed that urban concentrations could achieve educational and health standards unreachable in rural areas, primarily due to geographical constraints. Additionally, urbanisation was seen as crucial for bolstering rural productivity by offering agricultural markets and, more importantly, fostering regional agricultural specialisation.[7] A third proposition emerged in the report, suggesting the rapid development of smaller urban centres and the establishment of new urban growth centres.[8] The former could aid in modernising agricultural zones or lay the foundations for new manufacturing hubs, thus diversifying population distribution. The latter was deemed less favourable because initiating entirely new towns was considered extremely costly.[9] In the ensuing decade, spanning the 1970s to the early 1980s, the World Bank undertook projects aligned with all three strategies delineated in the *Urbanization* document.

4 World Bank, *The McNamara Years*, 259.
5 World Bank, *Urbanization*.
6 Ibid., 21.
7 Ibid., 22.
8 Ibid., 24.
9 Ibid., 24.

In addition to arguing that reducing urban poverty could help prevent people from being exploited by 'political extremists',[10] in his 1975 address, McNamara underscored that whilst the aggregate number of urban low-income people remained lesser than their rural counterparts, the former group was expanding rapidly. Current forecasts predicted a surge of 1.1 billion urban residents within 25 years, predominantly comprising low-income earners, supplementing the pre-existing 700 million urban populace.[11] The scale of the problem varied from region to region, with Latin America having 60% of its citizenry urbanised, in contrast to Asia and Africa's 25% at that juncture.[12]

One of McNamara's prime and enduring concerns throughout his tenure at the World Bank was devising strategies to furnish these urban populations with employment opportunities or aid them in accessing or qualifying for modern-sector roles.[13] He presented a detailed examination of urban impoverishment, commencing with the discrimination endured by those in the lower socio-economic brackets, particularly in their pursuit of fundamental services like water, sanitation, health, and education —these thoughts mirrored concepts linking development to basic needs.[14] He then referred to the shortage of public transport and the difficulties encountered by people living in poverty in connecting to urban infrastructure and workplaces. His discourse culminated with a discussion on urban housing challenges and plausible 'realistic' solutions.[15] The World Bank's urban projects, McNamara said, would address these different variables by understanding cities as 'an instrument for providing their inhabitants —all their inhabitants— with a more productive life'.[16]

10 World Bank, *The McNamara Years*, 316.
11 Ibid.
12 Ibid.
13 Ibid., 317-8.
14 Ibid., 325.
15 Ibid., 317-321.
16 Ibid., 321.

By 'realistic housing policies', McNamara alluded to avoiding what he described as city governments congratulating themselves on 'their subsidised blocks of low-income housing' and 'frequently impressive structures' without taking into account their inherent inaccessibility.[17] He stressed that 70% of the lowest-income population could not afford these public housing facilities. The *Housing Policy Paper*, released in January 1975, highlighted the high cost of the traditional low-cost housing approach. Analyses spanning six cities —Mexico City, Hong Kong, Nairobi, Bogota, Ahmedabad, and Madras— revealed that between 35% and 68% of city dwellers could not afford the full housing costs.[18] Also, this paper, in conjunction with *Urbanization*, reviewed and drew lessons from previous housing ventures promoted by institutions such as the UN, USAID, and IDB.[19] They acknowledged the multifaceted nature of urban challenges and the misguided attempts of the 1950s and 1960s, according to Bank experts.[20] Echoing the 1972 *Urbanization* paper, one proposed solution to mitigate housing expenditures was the implementation of self-help projects.[21] This notion was elaborated upon in the 1974 *Sites and Services* document and evaluated in the *Housing Policy Paper*, which also advocated the scheme of Slum Upgrading.[22]

Sites & Services and Slum Upgrading

In his 1975 address, Robert McNamara delineated the core principles of the World Bank's Sites and Services programme, stating that:

17 World Bank, *The McNamara Years*, 327.
18 World Bank, *Housing*, 8-9.
19 Ibid., 21-2.
20 Michael A. Cohen, *Learning by Doing: World Bank Lending for Urban Development, 1972-82* (Washington DC: World Bank, 1983), 4.
21 World Bank, *Urbanization*, 20.
22 World Bank, *Housing*; World Bank, *Sites and Services*.

> The city provides a suitable area of new land, grades and levels it, and furnishes it with essential infrastructure: access roads, drainage, water, sewerage, and electricity. The land is divided into small plots and is leased or sold to the poor, who are supplied with simple house plans, and a low-cost loan with which to purchase inexpensive building materials. The actual construction is made the responsibility of the poor, who build their houses themselves.
> And as communities are more than just housing, sites and services projects include schools, health clinics, community halls, day-care centres, and some provision for creating jobs: land, for example, set aside for the establishment of an appropriate small-scale industry.
> Sites and services projects, then, stimulate self-help, and make it possible for the poor to house themselves in a viable, cohesive community with a minimum of public expenditure.[23]

Slum Upgrading, on the other hand, was designed to avoid the need for slum clearance, thus circumventing the demolition of homes by legitimising the status of residents in informal settlements. As outlined in the *Housing Policy Paper,* this approach aimed to prevent the displacement of people from their current sources of employment.[24] The overarching objective was to provide people with secure tenure, fostering a climate in which they felt motivated to channel their savings into enhancing their built environment.[25] In this paradigm, residents could improve their dwellings through self-help initiatives. Depending on the informal settlement's population density, it was deemed imperative to implement water and sewage systems with minimal residential displacement. Concurrent discussions postulated the feasibility of erecting

23 World Bank, *The McNamara Years*, 328.
24 World Bank, *Housing*, 24-5.
25 World Bank, *The McNamara Years*, 328

multi-story structures to house those displaced by the upgrading process. This approach was based on the fact that many informal settlements, due to their favourable location in the city, offered better living conditions than moving to cheaper, peripheral land.[26]

By the 1970s, the World Bank recognised a conspicuous shortage of experience and expertise on the urbanization challenges facing developing countries, and the consequent difficulty in pursuing its urban agenda. This scarcity was noticeable both internally within the World Bank and externally.[27] In response, the Bank instituted the Urban Projects Department in the early 1970s, starting with a limited team of 10, which grew to 83 full-time staff by 1981.[28] The team was composed of 'architect-planners interested in low-cost design, engineers with experience in basic urban infrastructure, economists familiar with urban economics and the characteristics of the urban poor, and financial analysts with experience in municipalities and housing institutions'.[29] This composition did not reflect earlier multidisciplinary approaches, such as that adopted by CINVA in the late 1950s for housing or slum upgrading initiatives —described in the second part of this dissertation. For instance, the Bank's approach lacked insights from sociology experts and social workers. However, any gaps in these areas could be filled by external consultants or local technicians. This consideration may be relevant, as the World Bank aimed not only to assess the construction and service standards of proposed urban projects, but also to proactively introduce modifications in both design and implementation.[30] One external entity engaged by the World Bank in this context was the Urban Settlement Design in Developing Countries (USDP) group.

26 World Bank, *Housing*, 25.
27 World Bank, *Urbanization*, 53-8.
28 In his comprehensive study on the World Bank's role in urban development, Edward Ramsamy outlines the departments formed, merged, or separated during the 1970s and 1980s to handle urban projects: Ramsamy, *World Bank*, 78-97.
29 Cohen, *Learning by Doing*, 34.
30 World Bank, *Urbanization*, 67-8.

Urban Settlement Design in Developing Countries

The USDP originated in 1965 as a study programme at the MIT School of Architecture and Planning, with financial backing from the Ford Foundation International Affair Grants. Initially, its team consisted of students from the Department of Architecture under the guidance of Professors Horacio Caminos and John Steffian, who focused on architectural design challenges. Concurrently, John Turner concentrated on matters of urban settlements, squatters and social change.[31] In 1969, this team published *Urban Dwelling Environments*, which analysed sixteen urban environments —half in the US and the other half in Latin America. Steffian contributed the material on Boston, US, Turner provided insights about six cases in Peru and one in Venezuela, and Caminos collaborated with the case in Venezuela and another in Colombia.[fig.16] They analysed urban environments under the same parameters to better understand the relationship between people and their dwelling places.[32] An illustrative comparison detailed the life trajectories of two families, one in Boston, and the other in Lima, Peru. They account for the differences and similarities that occurred over time, with each family achieving a significant improvement in housing conditions —within the standards of their own context.[33] By 1973, Turner departed MIT for London, and by 1975, Steffian —a US architect with a master's in urban design from Harvard University— also left. Horacio Caminos, alongside former programme students, continued the USDP's endeavours.

Born in Argentina in 1914, Caminos obtained his architectural degree from the University of Buenos Aires (UBA) in 1939. Among his architectural contributions, he co-designed with Eduardo Catalano and Marcel Breuer the Ariston Parador in Mar

31 Horacio Caminos, John F. C. Turner, and John A. Steffian, *Urban Dwelling Environments: An Elementary Survey of Settlements for the Study of Design Determinants* (Cambridge: MIT Press, 1969), iv.
32 Ibid., vi.
33 Ibid., vii.

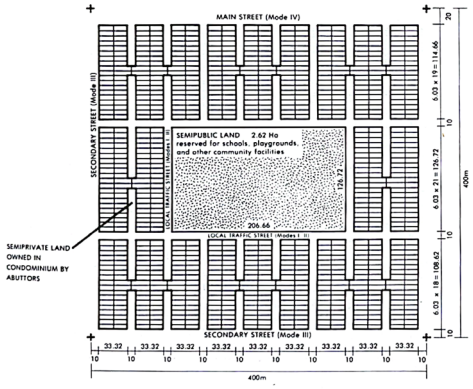


Figure 2: **OPTIMUM LAYOUT (No. 3)**

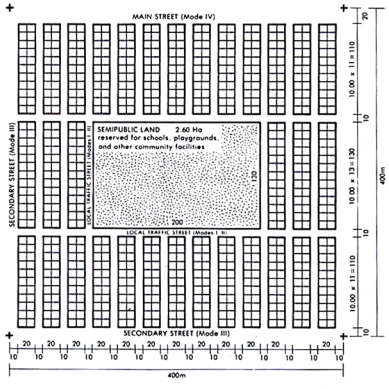


Figure 3: **DEFICIENT LAYOUT (No. 2)**

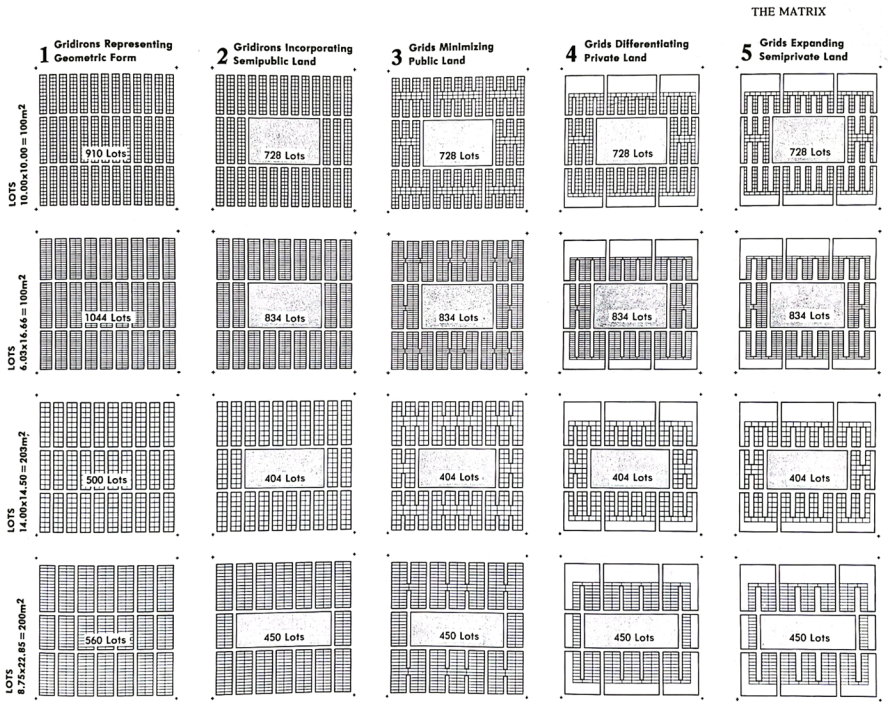
Fig.11 The Matrix. The two models illustrate extreme conditions of land utilization and circulation. To make the models comparable, plot areas are the same: 100m2; differences are in plot proportions and layouts. Source: Caminos and Goethert, *Urbanization Primer*, 21.

del Plata, Argentina, and co-authored the project for the Ciudad Universitaria of the UBA.[34] Following his tenure at the Universidad Nacional de Tucumán, Argentina's political climate prompted his relocation to London in 1951, where he lectured at the Architectural Association. In 1952, he moved to the US, affiliating first with the School of Design at North Carolina State University in Raleigh, and in the 1960s with Harvard and then with MIT in Cambridge.[35] At MIT, Caminos delved into urban projects, encompassing teaching, research, and even designing projects in Latin America and Africa, some of which were commissioned by the World Bank.

In 1978, Caminos, together with US architect Reinhard Goethert, published the book *Urbanization Primer: Project assessment, site analysis, design criteria for site and services or similar dwelling environments in developing areas.*[36] Goethert, a graduate of North Carolina State University and an MIT professor, was also an alumnus of the USDP. The content of the book was commissioned by the World Bank, which employed several USDP graduates, including Praful Patel —involved in the publication—, Roberto Chavez, Tara Chana and George Gattoni, among others.[37] Notably, architect Gattoni acted as the World Bank counterpart during the period when Caminos and Goethert, representing USDP, undertook a Sites and Services project in Bolivia in the late 1970s —a project discussed in the fourth chapter of this dissertation part.

Urbanization Primer was the expanded version of a document drafted two years earlier to provide information and guidelines to the World Bank's Urban Projects Department.[38] While the document maintained a focus on the relationship between the people and their dwelling places, and incorporated information from some of the cases published in ***Urban Dwelling Environments,*** its aims were different. The primer set out to establish design benchmarks for initiatives like Sites and Services. It was conceived to function as a reference framework, adaptable to various local determinants such as topography, soil, climate, locally sourced materials, local practices or standards, cultural acceptance, costs of materials, labour, equipment, and land, and more.[39] The research endeavoured to offer tools to inform both policy decisions and physical design strategies, presenting methodologies to optimise costs for both policymakers and design professionals.[40] The publication thoroughly evaluates different variables, suggesting urban design matrices for plot distribution and size, as well as for urban service network placements, to be tailored as per contextual needs.[figs.11-3] Concluding the book is a series of photographs illustrating specific issues —ranging

34 Jorge Francisco Liernur and Fernando Aliata, eds., *Diccionario de arquitectura en la Argentina: estilos, obras, biografías, instituciones, ciudades*, vol. 2 (Buenos Aires: Clarín Arquitectura, 2004), 16-7.
35 Carlos H. Caminos, *Horacio Caminos. Teacher/Docente*, 2012, xix-xxi.
36 Horacio Caminos and Reinhard Goethert, *Urbanization Primer: Project Assessment, Site Analysis, Design Criteria for Site and Services or Similar Dwelling Environments in Developing Areas* (Cambridge: MIT Press, 1978).
37 Caminos, *Horacio Caminos*, 9.
38 Caminos and Goethert, *Urbanization Primer*, 4.
39 Ibid., 8.
40 Ibid., 7.



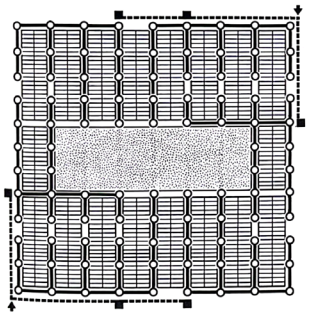


Figure 3: **EQUIVALENT LAYOUT IN GRIDIRON FORMAT**

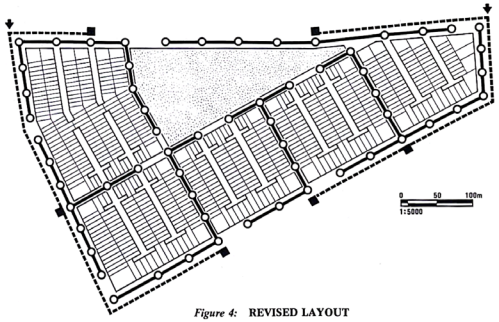
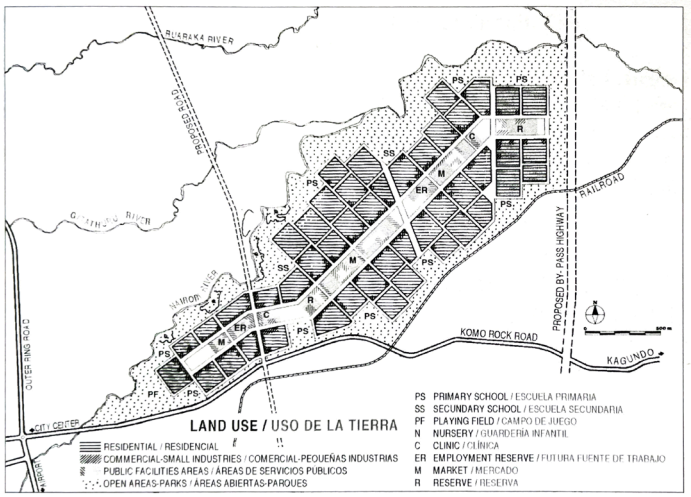


Figure 4: **REVISED LAYOUT**

Figs.12-3 (top): The matrix containing basic reference models representing elementary physical models of circulation, land utilization and land subdivision; covering typical layouts, common plot areas and proportions; and provided with infrastructure at minimum and standard levels. (bottom) Application of the matrix to a case in a Latin American urban area, showing the distribution of plots, electricity and street lighting. Sources: Caminos and Goethert, *Urbanization Primer*, 109, 47.



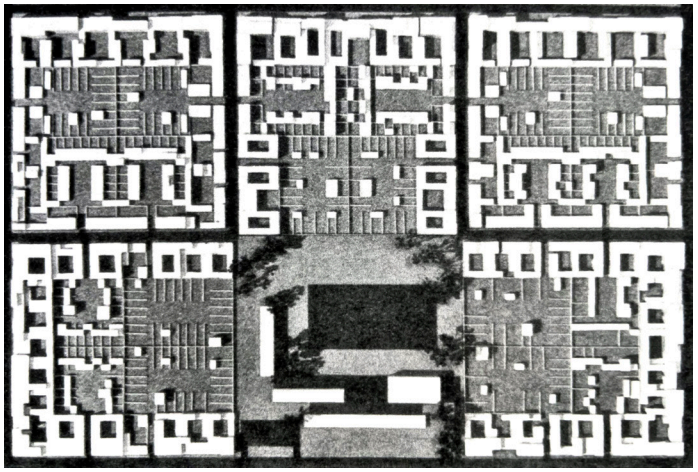


Fig.14-5 Interim urbanization project Dandora, Nairobi, Kenya. 1973. Horacio Caminos with Reinhard Goethert, Pratful Patel, Gerge Gattoni, and the support of Tara Chana and members of the USDP, MIT, and the Department of Architecture, University of Nairobi, Kenya. Sources: Caminos, *Horacio Caminos*, 30,31

Fig.16. Informal settlement in Cuevas, Lima, Peru. 1965. Source: Caminos, Turner, and Steffian, *Urban Dwelling Environments*, 133.

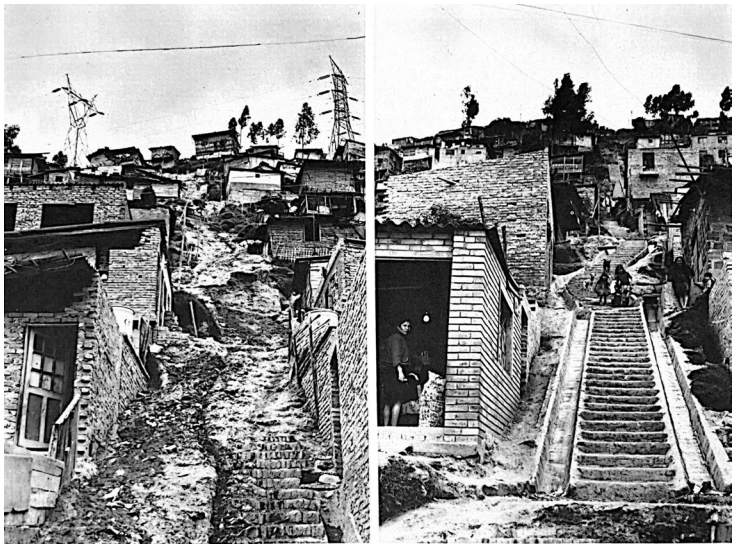


Fig.17. Before and after stages of improvements carried out by community action. Las Colinas, Bogotá, Colombia. 1972. Source: R. Goethert. and E. Popko in Caminos and Goethert, *Urbanization Primer*, 207.

from public spaces and street lighting to storm drainage and fences, among many others— seen in diverse environments like informal settlements, affordable housing, and slum upgrading projects across different nations including Colombia, Egypt, Turkey, Taiwan, the Philippines, India, among other developing countries.[fig.17]

The USDP had previously crafted a 'sites and services' strategy in 1972 for Nairobi, Kenya, a site the World Bank took under development in 1975.[41] [figs.14-5] Later, between 1978 and 1980, Horacio Caminos and the USDP were notably prolific, undertaking six housing initiatives for the World Bank in Guatemala and Bolivia, and another in collaboration with FUNDASAL in El Salvador.[42] The Río Seco project in El Alto, Bolivia, saw leadership from Caminos, collaboration with Goethert, and involved Gattoni, who liaised from the World Bank. The design concepts explored in the *Urbanization Primer* were clear in the urban layout of Río Seco. Caminos' work would have been based on a design proposed by Bolivian architect Jaime Murillo Palacios in La Paz. The two professionals met at MIT in the context of this project, as described below. Río Seco represents a synthesis of the trajectory of ideas channelled through diverse North-South platforms, from the World Bank's Urban Projects Department and academic groups such as MIT's USDP, to national institutions such as CONAVI, the Bolivian housing authority where Murillo Palacios worked.

41 Caminos, *Horacio Caminos*, 28-31, 116-7.

42 Caminos, *Horacio Caminos*, 18.

The World Bank was instrumental in addressing poverty in developing countries through housing initiatives. This study will now examine the expansive global scope of the Urban Projects Department, focusing on its Sites and Services and Slum Upgrading initiatives across diverse cities in Latin America, Africa, and Asia between 1972 and 1981.

3

Global Scaling
Architectures of Sites & Services and Slum Upgrading in the 'third world'

Between the initial pilot in Senegal in 1972 and the inception of a project in Yemen towards the end of 1981, the World Bank financed over 350 housing operations across more than 150 cities and towns within 35 countries across Latin America, Africa, and Asia.[fig.18] These initiatives spread the concept of homeownership, characterised by single-family dwellings on individually owned plots, built primarily through aided self-help schemes. Such approaches minimised state intervention and subsidies. These strategies aimed to reach the lowest-income groups in the then 'third world' by inserting market tactics in areas inaccessible to both national and local governments and the private sector.

The drive for these housing endeavours was largely due to the deployment of Sites and Services projects and Slum Upgrading programmes. These continued the trajectory of aided self-help and homeownership. This thesis has examined such practices predominantly within an inter-American route, tracing its origins to Puerto Rico around 1939. The approach expanded post-Point Four during the Cold War era, adapting to current development discourses, reaching to Suriname and Caribbean territories, then descending to the southern cone of South America, exemplified by Chile, before replicating similar strategies in Central American nations such as Guatemala, Panamá, Costa Rica, and Nicaragua. The 1960s saw the Alliance for Progress, via organizations like the IDB and USAID, extend these aided self-help methodologies to the impoverished while simultaneously offering completed housing solutions for the middle-income demographic in satellite cities such as Ven-

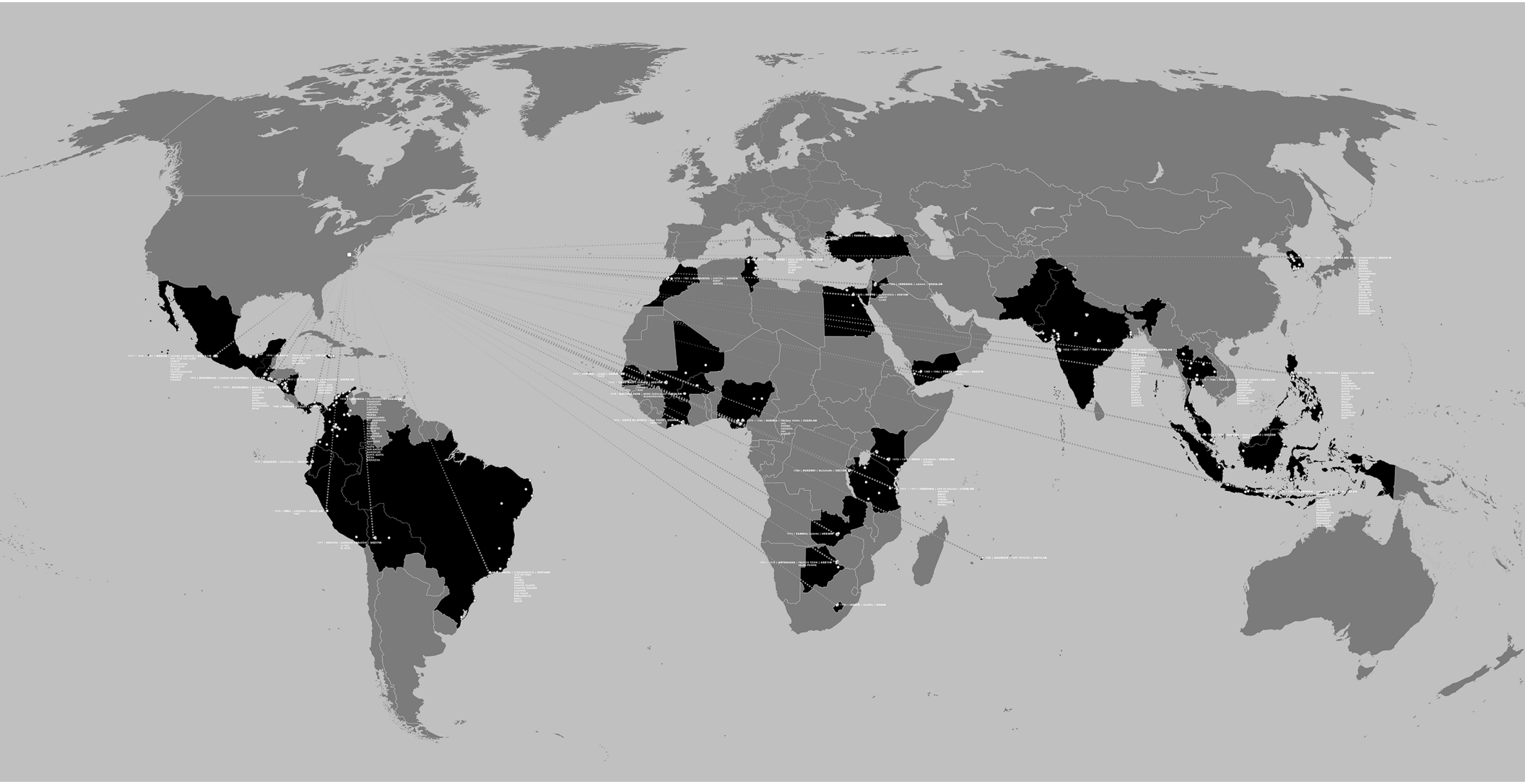


Fig.18. Between 1972 and 1981, the World Bank implemented over 350 housing operations in more than 150 cities and towns across 35 countries in Latin America, Africa, and Asia: Bolivia, Botswana, Brazil, Burkina Fasso, Burundi, Colombia, Cote d'Ivore, Ecuador, Egipto, El Salvador, Filipinas, Guatemala, India, Indonesia, Jamaica Jordania, Kenya, South Korea, Lesotho, Malaysia, Mali, Mauritius, Méjico, Morocco, Nicaragua, Nigeria, Panamá, Perú, Senegal, Tailandia, Tanzania, Tunisia, Turkey, Yemen, and Zambia. Source: By author with Bárbara Salazar, Melinka Bier, Carlos Díaz and Gabriel Fuentes.

tanilla in Perú, Ciudad Techo in Colombia, and Ciudad Satélite in Bolivia. Subsequently, in the 1970s, the World Bank assumed the mantle, propelling the advancement of private ownership, now with the explicit objective of eradicating absolute poverty.

A global overview of the World Bank's housing operations reveals the extent of their reach, encompassing numerous, small, dispersed, and isolated locations —as seen in the map on the previous page. These projects were implemented across a spectrum of latitudes and altitudes, situated in cities with vastly differing climates, topographies, and cultural demographics. The resulting urban developments varied in scale, ranging from modest enclaves within dense urban fabrics to extensive peripheral housing developments. The underlying intent of these myriad interventions was not simply to resolve the housing crisis through isolated constructions but to embed architectural strategies, urban design principles, planning policies, regulatory frameworks, management techniques, and financial models. These elements were anticipated to be adapted and upscaled locally through a collaborative synthesis of international and domestic insights, facilitated by joint endeavours between the World Bank, governmental bodies, educational and research institutions, NGOs, and private sector entities. Success also hinged on community organization, the training of local expertise, and the strategic deployment of international specialists to remote locations.

In light of the scope and diversity of the World Bank's urban interventions, the Sites and Services and Slum Upgrading initiatives drew on a set of cross-cutting architectural and urban design principles. These principles required contextual translation across various contact zones, accommodating local adaptations, negotiations, and disputes among differing cultural backgrounds. On a fundamental level, the global reach of the over 350 housing projects could be scaled down into elemental components, such as the narrow, elongated single-family plots held in private ownership and connected to essential metropolitan infrastructures.

These minimum design units were integral to the Sites and Services strategy, which prioritised the outlining of regular urban layouts aimed at economic spatial efficiency. The strategy's goal was to distribute families across the smallest feasible area while allocating a minimal proportion of public space. Additionally, the urban design embraced a comprehensive approach to housing, endorsing family development through the strategic provision of community facilities, including educational institutions, vocational training centres, religious spaces, commercial zones, healthcare facilities, police stations, and recreational areas.

Architectural, urban design and planning strategies emerged from extensive collective experiences, such as those investigated in this thesis. These strategies extend beyond the contributions of individual influential planners or architects.[1] The following exploration delves into reports and visual materials housed within the World Bank archives, including architectural plans, urban schematics, territorial maps, diagrams, sketches, and photographs. Many of these materials were declassified during the course of this research and are now accessible online for public examination. They shed light on the tactics and extent of the housing operations promoted between 1972 and 1981 under the leadership of Robert S. McNamara.

The examination adopts a scalar approach, commencing with the individual housing plot and progressively expanding to encompass the block, neighbourhood, city, and nation. This trajectory tracks the architectural developments across the continents of what was then referred to as the 'third world'. The comprehensive review of World Bank archival documents is both refined and supplemented by the next chapter's investigation of local materials, focusing on a specific case study in Bolivia.

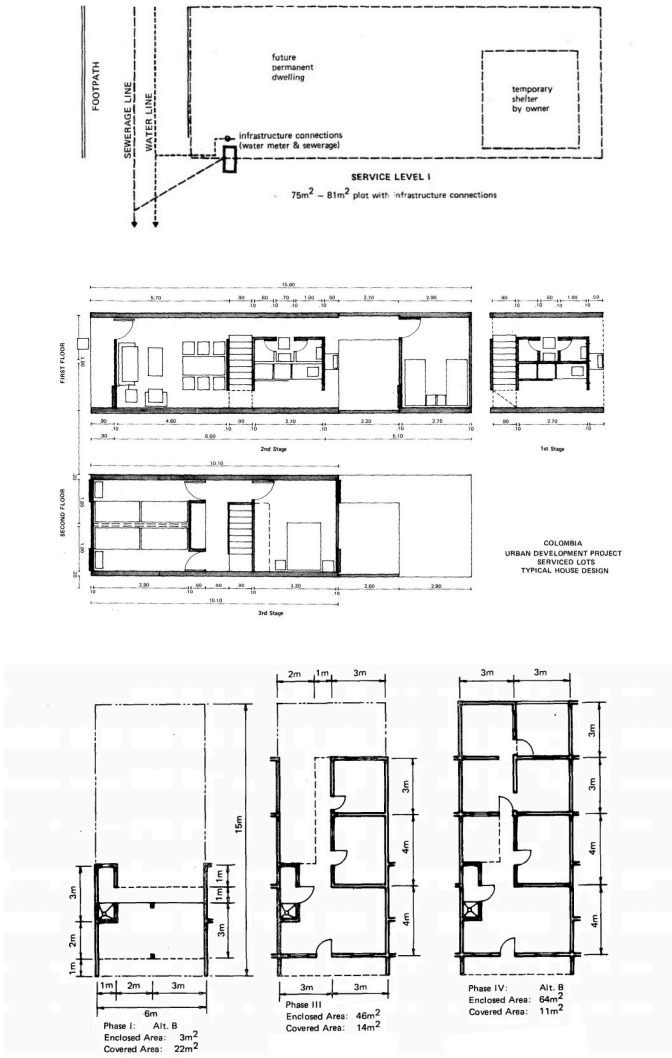
1 The role of architects such as the John F. C. Turner is mentioned in the first part of this thesis, through the work of Richard Harris, among other researchers.

The housing plot as the minimum design unit of a worldwide project

The single-family plot, as the foundational design element of the World Bank's global housing initiative, played a dual role. It served as a constraining factor in architectural projects for individual homes and as the fundamental unit in the urban design of neighbourhoods. These plots were designed to be as narrow and deep as possible within the constraints of the specific construction site. The narrow frontage of these plots was not arbitrary; it aimed to optimise economic efficiency in urban infrastructure investment. This design facilitated the distribution of a maximum number of contiguous single-family plots, serviced by the minimum linear metres of water, sewage, and electrical networks, thereby reducing utility construction costs.[fig.19-21] Moreover, the plot dimensions imposed limitations on the architectural design of the housing units and courtyards, which were to be built progressively by the families. This incremental building approach aligned with densification strategies that sought to preserve minimal living conditions over time.

Plot frontages were often exceedingly narrow; for instance, in the 1977 Madras project in India, plots could be as slim as three metres wide.[fig.22] This project encompassed over 13,000 plots, with 75% being 47 square metres or less, thus resulting in high density within the new Sites and Services neighbourhoods.[2] Comparable in size were the generic plots in the 1978 project in Colombia, measuring 3.9 metres wide, and the core rowhouse prototype in Bangkok, Thailand, at 4.2 metres wide.[figs.23] The Bangkok Sites and Services project catered to various income brackets, with plots ranging from 83 to 200 square metres. The smaller plots were targeted at households earning around the twelfth percentile of

2 World Bank, 'India - Appraisal of the Madras Urban Development Project (English)', Staff Appraisal Report (Washington: World Bank, 15 February 1977), 8.



Figs.19-21. Housing plots in Guatemala (top), Colombia (middle), and Ecuador (bottom) Sources: World Bank, 'Guatemala - Earthquake Staff Appraisal', 107; World Bank, 'Colombia - Urban Staff Appraisal', annex 3, 28; World Bank, 'Ecuador - Guayaquil Staff Appraisal', 64.

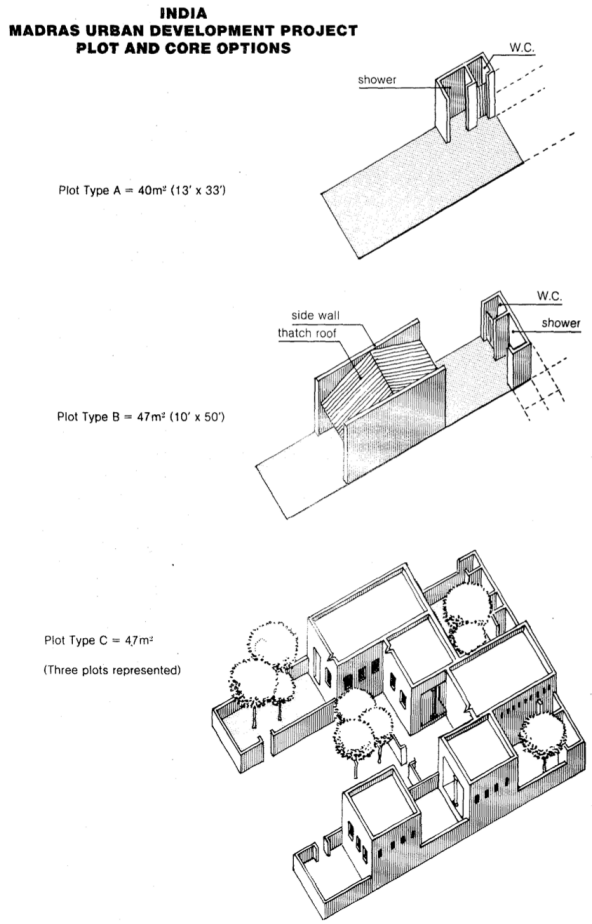


Fig.22. Housing operation in India. Source: World Bank, 'India - Madras Staff Appraisal', 209.

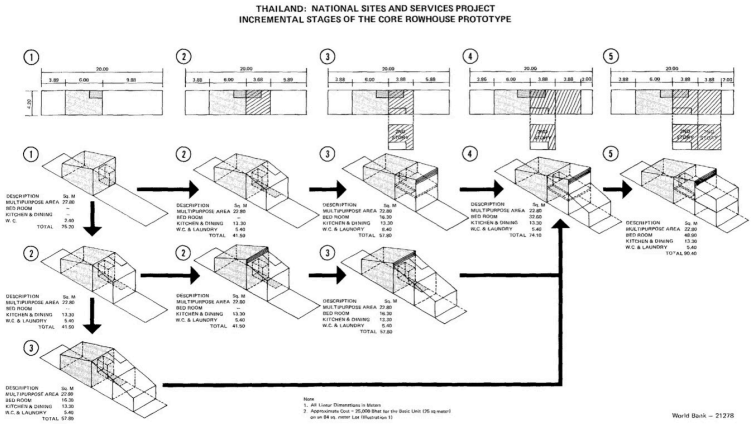


Fig.23. Housing operation in Thailand. Source: World Bank, 'Thailand - National Sites Staff Appraisal', 60.

Bangkok's income distribution.[3] While these narrow sites maximised initial urban infrastructure investment efficiency, they also presented significant challenges for densification. Issues such as overcrowding or insufficient ventilation and natural light could arise swiftly in such constrained spaces.

The World Bank adhered strictly to the policy of selling single-family sites as private property to residents. The rationale, echoing the slogans of the 1960s such as World Homes' 'every man a homeowner - every man a capitalist,' was that individual homeownership would offer families security against eviction and encourage investment in their properties. In a sense, the Bank's strategy was to atomise its national loans directly to individuals. Thus, low-income families would repay these loans through the acquisition of land and construction materials, in addition to contributing their own labour for home construction, under the guise of active

3 World Bank, 'Thailand - Bangkok Sites and Services and Slum Improvement Project (English)', Project Completion Report (Washington: World Bank, 7 May 1986), 10-1.

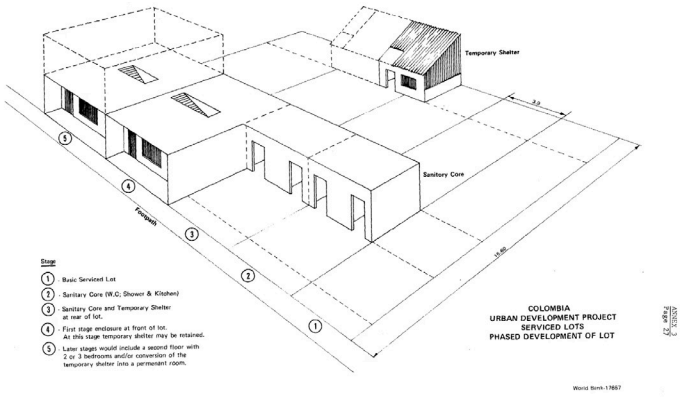


Fig.24. Colombia housing project. Source: World Bank, 'Colombia - Urban Staff Appraisal', annex 3, 27.

participation. Over two decades, the World Bank aimed to recoup its investment, plus a modest interest —though families frequently faced challenges in repaying the loans.

The Colombia scheme illustrates the incremental growth model for these plots.[figs.24] Initially, a plot might be delivered simply outlined and connected to infrastructure. A subsequent stage could include a sanitary core provided by a construction firm, or built by the families, varying by country. In Colombia, this core occupied the central width of the plot, significantly influencing the architectural development of the dwellings over time. It also allowed for a temporary structure at the plot's rear to be hidden, where families could reside while a more permanent front-facing dwelling was constructed, thus ensuring a uniform street facade.

This continuous façade model was prevalent in Latin American urban design, as seen in the Dominican Republic's schemes, where the dwelling expanded towards the front and back of the plot, often at the expense of courtyard space.[fig.25] In contrast,

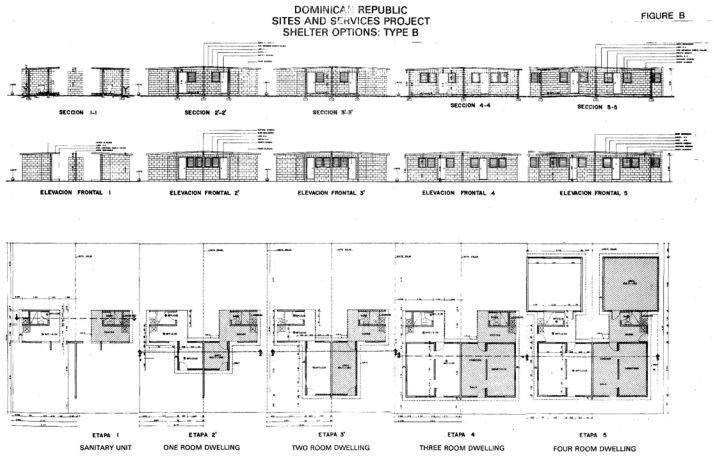
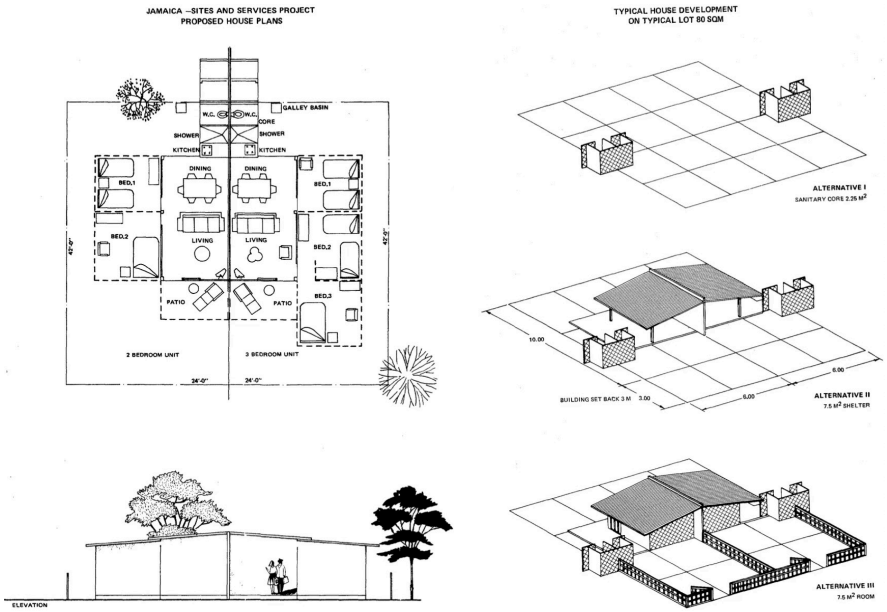


Fig.25. Housing project in Dominican Republic. Source: World Bank, 'Dominican Republic - Sites Staff Appraisal', 101.

the Colombian approach outlined potential vertical densification, preserving a backyard, although alternate plans suggested expansions that would preclude any courtyard space —as in Ecuador.[figs.20-1]

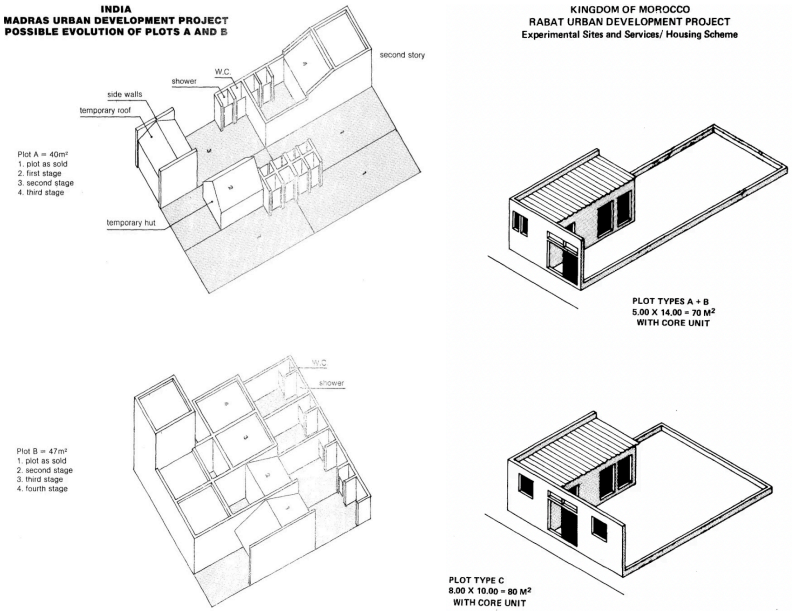
The World Bank's single-family housing projects exhibited a range of architectures, from the mentioned contiguous street frontages to completely detached houses on individual plots, as demonstrated in the Sites and Services and Slum Upgrading projects in Chawama, Lusaka City, Zambia circa 1975.[fig.2] At that time, Zambia was one of the most urbanised countries in Africa, South Africa being the exception.[4] By 1978, projections indicated that 40% of the population would reside in urban areas. These World Bank initiatives built upon the type of site and service programmes that Zambia had initiated in 1965, with the slum upgrading component introducing infrastructure and housing using new materials.[figs.1,31]

4 World Bank, 'Zambia - Lusaka Squatter Upgrading and Sites and Service Project (English)', Staff Appraisal Report (Washington: World Bank, 24 June 1974), i.



Figs.26-7. Housing operations in Jamaica (left), and Indonesia (right). Sources: World Bank, 'Jamaica - Staff Appraisal', annex 3, 8; World Bank, 'Indonesia - Fourth Staff Appraisal', 91.

Another model employed was semi-detached housing with shared party walls, as implemented in urban operations in Jamaica and Indonesia during 1974 and 1980.[figs.26-7] This configuration evoked a suburban vision, with homes set back from the street, accommodating both a front garden and a backyard. In Jamaica, the placement of the sanitary core at the rear and to the side of the plot enabled the construction of four units together, which reduced both construction costs and time —as is also seen in India.[fig.28] The initial construction phase included a communal area, destined to become the living and dining rooms, with adjacent bedrooms. Jamaica's sites were notably spacious compared to other projects, with widths of up to 7.3 metres.



Figs.28-9. (left) Four sanitary cores together in a 4-site corner in India. (right) Morocco housing plot. Sources: World Bank, 'India - Madras Staff Appraisal'. 211; World Bank, 'Morocco - Rabat Staff Appraisal', annex 1, 7.

In Indonesia, the axonometric plans depict pairs of single-family dwellings connected by their sanitary cores, featuring pitched roofs and low surrounding fences for their gardens. These plots averaged 6 metres in width, the dimension most commonly recommended in World Bank reports for various countries, including Bolivia, Ecuador, Mexico, Indonesia, and India.[figs.21,27] Smaller plots, such as those in El Salvador and Morocco, measured approximately 5 metres in width.[fig.29] Nevertheless, the prevailing trend across these cases was towards the development of continuous frontage housing adjacent to the street.

The incremental self-help building of the single-family plot

The incremental evolution of the single-family plot —and sometimes that of the entire neighbourhood— engaged entire families in the construction process. This included men, women, children, and the elderly.[fig.31-2] Typically, they devoted their spare time —late afternoons, evenings, weekends, and holidays— to housebuilding. In some instances, an empty plot was provided; in others, a preliminary sanitary core was constructed by a company.[fig.30] El Salvador's scheme illustrates two approaches: families individually building their homes and a phase being a collective mutual-help effort. Here, neighbourhood residents would construct all the houses without predetermined allocations. Ownership was often decided at the completion of stages or the entire project, through a lottery or an earned points system based on labour contributed.

Technical assistance accompanied this self-help process, providing initial house plans and training in construction techniques. This support aimed to allow for the adaptation of World Bank-provided general plans, or those developed in conjunction with local offices, integrating some local cultural characteristics. Thus, variations emerged, ensuring that a standardised model could be assimilated by the local community and adjusted for different climatic or topographical conditions. Photographic record from the Sites and Services project in San Salvador indicates user-initiated, albeit minor, possibly ornamental modifications.[fig.3] Plans for a Pakistani project included adaptations such as small shops and temporary kiosks within the residential sites, which were absent in other projects examined. The subsequent chapter will hypothesise the role of the inner courtyard in combining Western designs with the translation of local rural concepts from indigenous Bolivian communities.[figs.80-2]

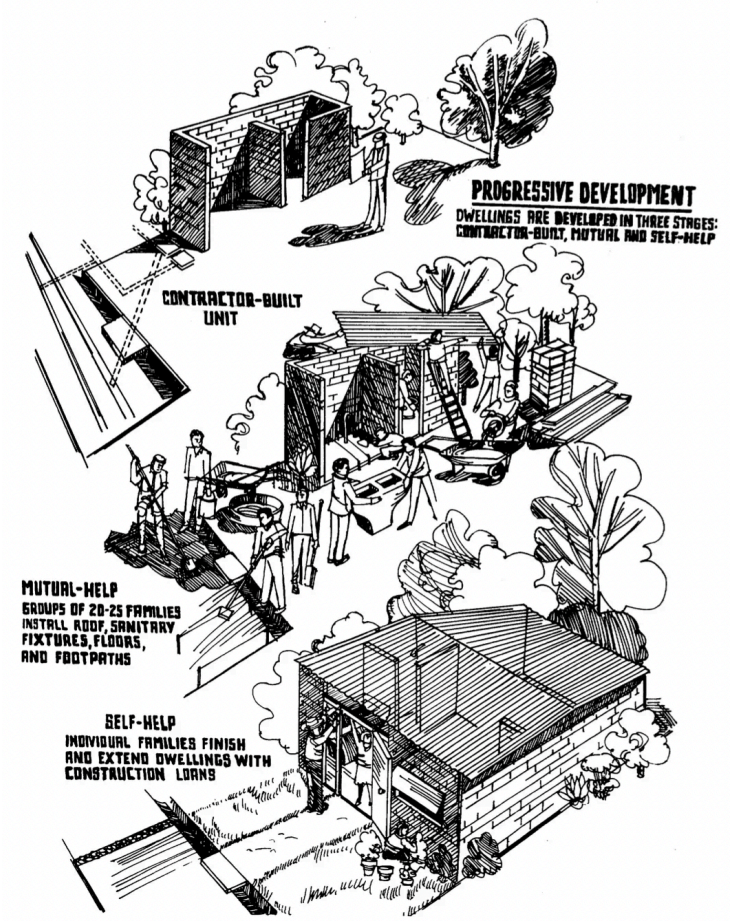
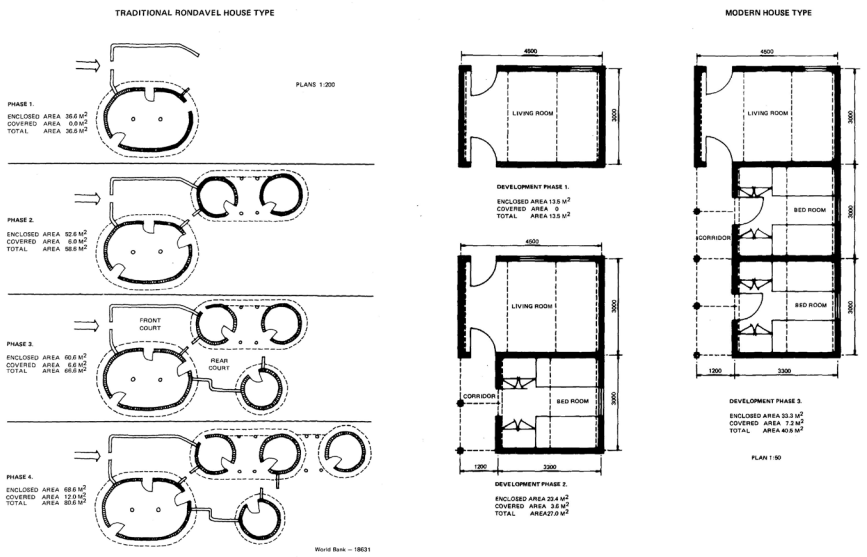


Fig.30. Housing operation in El Salvador. Source: World Bank, 'El Salvador - Second Staff Appraisal', 31.

The reviewed World Bank reports do not clearly demonstrate the extent of co-authorship families may have exercised in the design and construction of their homes beyond their contribution as labour. To uncover such nuances, it is necessary to consult local archives or accounts.

Figs.31-2. Housing operation in Zambia (top), and El Salvador (bottom). Sources: World Bank Group/Edwin G. Huffman; World Bank Group/Jaime Martin Escobal.



Figs.33-4. Housing operation in Botswanna. Source: World Bank, 'Botswana - Second Staff Appraisal', 74,73.

Sometimes, in the process of designing housing, the World Bank experts exhibited an interest in local typologies, construction methods, and materials. Nonetheless, these culturally informed strategies were not consistently reflected in the completed projects. The resultant dwellings often embodied a modern aesthetic that replaced traditional vernacular architectures, as observed in Zambia.[fig.1]

During the 1978 housing initiative in Botswana, the World Bank contrasted the indigenous rondavel with the 'modern' house.[fig.33-4] Reports depicted the traditional rondavel as an expandable series of circular rooms arranged around courtyards with no intersecting walls. The modern counterpart commenced with a living room, with additional bedrooms subsequently attached. The modern structures were envisaged as concrete edifices, financed

FRANCISTOWN: TATITOWN TRADITIONAL HOUSING – A PART OF THE FRANCISTOWN URBAN DEVELOPMENT PROJECT

FRANCISTOWN: SITE AND SERVICES AREA – A PART OF THE FRANCISTOWN URBAN DEVELOPMENT PROJECT

Figs.35-6. Housing operation in Botswanna. Source: World Bank, 'Botswana - Second Staff Appraisal', 82,83.

through building materials loans. In contrast, the traditional dwellings were envisaged to be constructed using local methods, including rammed earth and thatch, at approximately half the cost of their modern equivalents.[5] Nonetheless, there was concern that this duality in housing options might result in socio-economic segregation within the community.[6] In Francistown and Selebi-Phikwe, both housing strategies were pursued, with Selebi-Phikwe focusing more on the traditional methods.[7]

In Senegal, the World Bank initiated a housing project in 1972, where the emphasis was on promoting a two-room unit through the Sites and Services project. The failure to attract buyers to this model was attributed to the absence of a surrounding wall

5 World Bank, 'Botswana - Second Urban Project (English)', Staff Appraisal Report (Washington DC: World Bank, 8 May 1978), 27-8.
6 World Bank, 'Botswana - Second Project Staff Appraisal', 20.
7 World Bank, 'Botswana - Francistown and Second Urban Development Projects (English)', Project Performance Audit Report (Washington DC: World Bank, 25 June 1990), 14.

—considered essential for privacy within the polygamous context of Senegalese culture.[8] This oversight underscores the importance of cultural considerations in housing design and suggests a disconnect between the Bank's objectives and the local populations' needs and values.

In Mali's 1979 housing project, reports revealed that approximately 80% of Bamako's housing comprised simple mudbrick constructions.[9] Initially, there was a discernible interest in utilising indigenous techniques. The project documentation contrasted self-help mudbrick construction with small-scale contractors using cement blocks.[fig.37] Consequently, the Sites and Services project encompassed a strategy to foster the adoption of enhanced indig-

8 World Bank, 'Senegal – Sites and Services Project (English)', Project Completion Report (Washington DC: World Bank, 31 October 1983), 19.
9 World Bank, 'Mali - Urban Development Project (English)', Staff Appraisal Report (Washington DC: World Bank, 21 May 1979), 3.

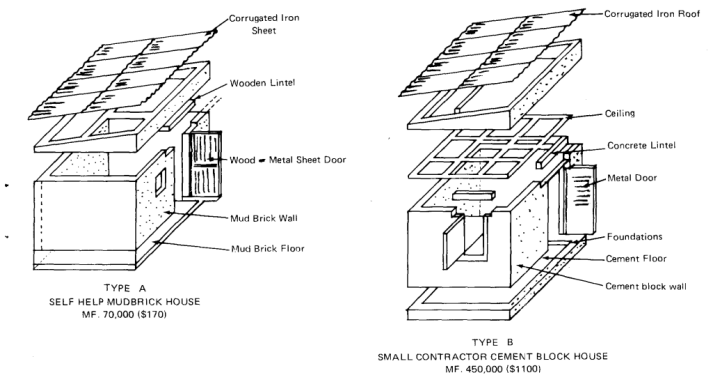


Fig.37. Housing operation in Mali. Source: World Bank, 'Mali - Urban Staff Appraisal', 63.

enous building materials —principally stone and stabilised mud brick— with objectives that aimed to serve the low-income demographic, diminish cement imports —which were subsidised by the government— and enhance the skills of local craftsmen and contractors in 'appropriate' building methods.[10]

However, this initiative encountered a paradox. World Bank assessments ultimately suggested that while earth-based structures might be less expensive initially, they necessitated significant, costly annual upkeep. The initial study did not assert that utilising local materials would directly lower construction costs but proposed it might cut down on cement imports. When the expense of constructing with local materials reached quadruple that of cement block construction, as in the Magnambougou school case: 'it became clear to the experts what families in Bamako appeared to have known all along'.[11] Additionally, there was an observed aversion to local materials among homeowners, though the reports did not elucidate the rationale behind this.[12] The reports also omitted the reasons why the Malian government itself discouraged the use of adobe bricks, while promoting and advising the use of 'imported, so-called modern building materials'.[13]

Beyond adapting global housing designs to local conditions, the self-help model also facilitated community organisation. This was evident in mutual assistance for neighbourhood construction and the establishment of private enterprises, such as small construction companies. These developments aligned with the World Bank's employment generation objectives. Support was provided to families to produce building materials like bricks and timber components, enabling them to supply local construction needs and distribute them to other city projects. The report references the Basotho Enterprises Development Corporation in Lesotho as an exemplar of such local entrepreneurial activity, highlighting 'Basotho entrepreneurs' in the photographs of the Maseru urban project.[fig.38]

The 1980 visual documentation of urban upgrading in Jordan exhibits a distinctive construction methodology through the visible reinforcement of a concrete component designed to facilitate future vertical extension. Such a technique, while uncommon in the World Bank's housing projects, potentially contributed significantly to the urban development in Amman. The prevalent construction method endorsed by the Bank usually involved various materials for brick stacking, a technique deliberately chosen for its simplicity and ease of replication, even by those with minimal construction experience. Nevertheless, feedback from prospective residents on demonstration units in Jordan prompted a shift from load-bearing blockwork to a framework of reinforced concrete with infill blockwork.[14]

10 World Bank, 'Mali - Urban Project - Staff Appraisal', 14.
11 World Bank, 'Mali - Urban Development Project (English)', Project Performance Audit Report (Washington DC: World Bank, 23 June 1989), 24, 45-6.
12 World Bank, 'Mali - Urban Project - Project Performance', 43.
13 Ibid., 43.
14 World Bank, 'Jordan - Urban Development Project (English)', Project Completion Report (Washington DC: World Bank, 23 June 1989), 72.

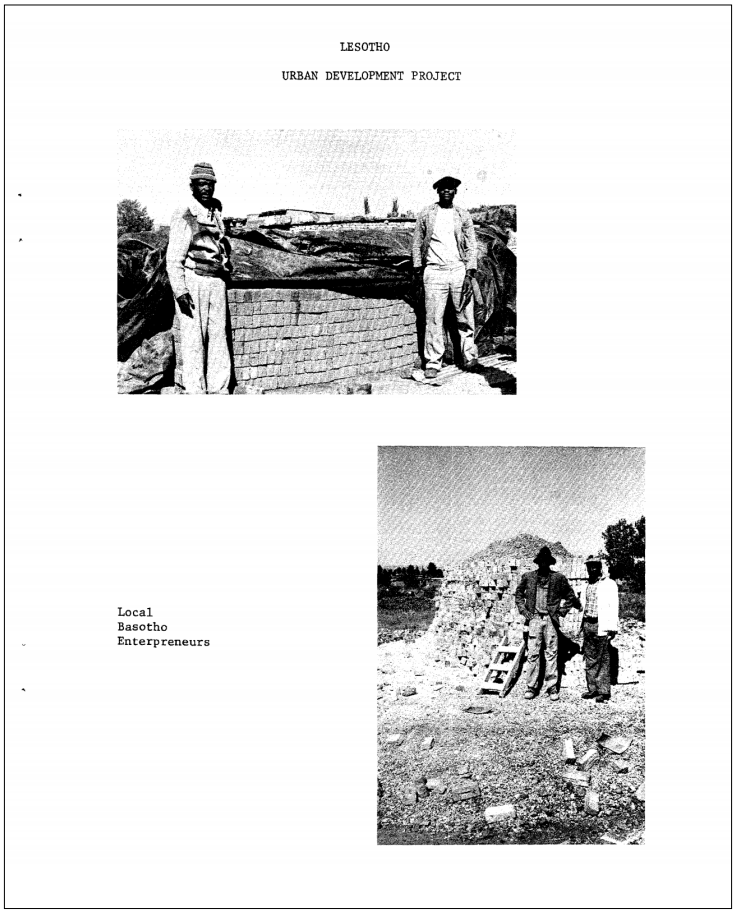
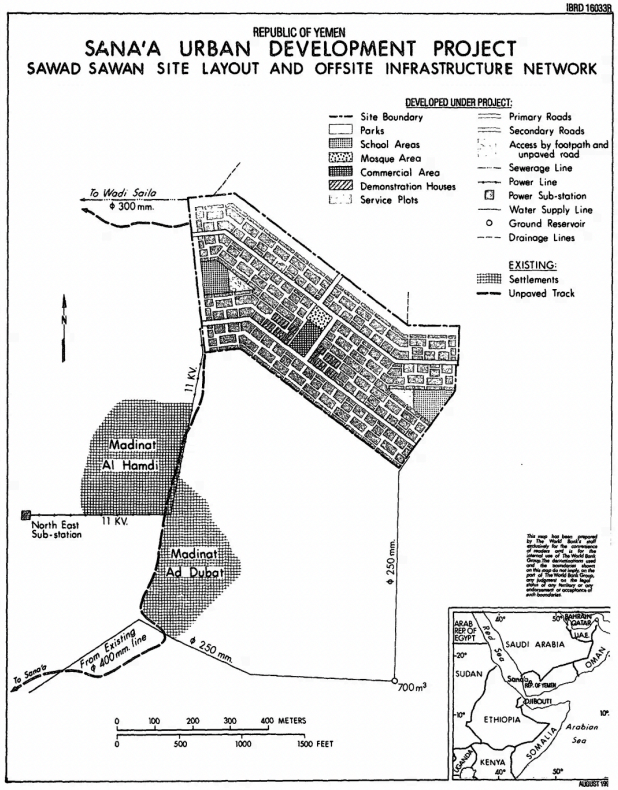


Fig.38. Housing operation in Lesotho. Source: World Bank, 'Lesotho - Urban Staff Appraisal', 63.

This transition to more technically demanding construction techniques deviated from the norm for Sites and Services or Slum Upgrading initiatives, which typically require less technical skill and oversight. Ultimately, a mere ten per cent of homes in Jordan's upgraded areas were built by self-help by families. In contrast, the majority were erected by informal or 'casual' contractors, a term used in World Bank reports to describe those hired typically through referrals. In these cases, the homeowner would provide materials and oversee the work but would not engage directly in the construction process.[15] This trend may have been influenced by the fact that construction was a significant sector within Jordan's small to medium-sized manufacturing industry.[16] Moreover, while these residences were designed as two-storey dwellings for single families, some occupants opted to rent out a portion of their home. This 'second apartment' provided a means to offset construction costs through advance payments from future tenants.[17]

Another approach to incremental housing and neighbourhood development is exemplified by the construction of demonstration homes, as seen in the collection of white houses erected in the Yemeni desert.[fig.39] The World Bank introduced a Sites and Services component in Sawad Sawan, featuring 142 demonstration houses to promote the use of cost-effective materials and construction techniques among local contractors and individual builders —of which 126 were completed.[18] A private local company was commissioned for this initiative.[19] Centrally situated within the designed neighbourhood unit, 1,525 serviced plots encircled these demonstration houses. Here, other families were encouraged to erect their own homes, using the demonstration houses as a model for construction.[20] [fig.40]

15 World Bank, 'Jordan - Urban Project - Project Completion', 32.
16 Ibid., 30.
17 Ibid., 14.
18 World Bank, 'Yemen Arab Republic - Sana'a Urban Development Project (English)', Staff Appraisal Report (Washington DC: World Bank, 30 December 1981), 13; World Bank, 'Republic of Yemen - Sana'a Urban Development Project (English)', Project Completion Report (Washington DC: World Bank, 30 June 1993), ii, 2.
19 World Bank, 'Republic of Yemen - Sana'a - Project Completion', 4.
20 Ibid., 6.



Figs.39-40. (top) Demonstration houses in Sana'a, Sawad Sawan, Yemen, 1987. Source: Abdul-Halim Jabr, courtesy of Aga Khan Documentation Center, MIT Libraries (AKDC@MIT). (bottom) Sites and Services neighbourhood in Sana'a. Source: World Bank, 'Yemen Arab Republic - Sana'a Staff Appraisal', 69.

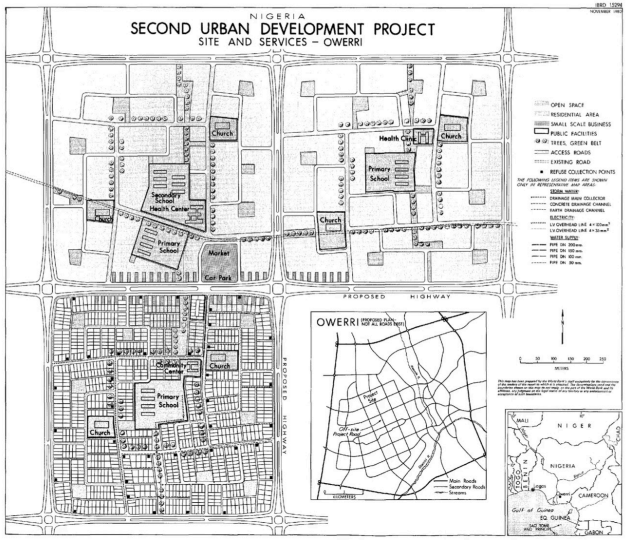


Fig.41. Sites and Services project in Owerri, Nigeria. Source: World Bank, 'Nigeria - Second Staff Appraisal', 85.

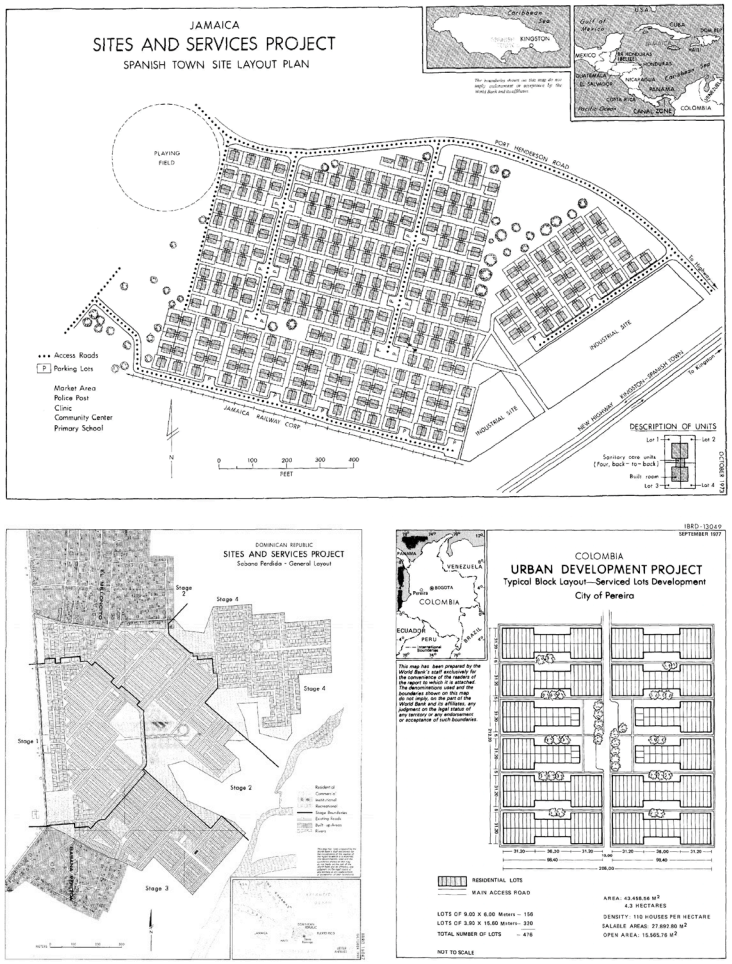
The neighbourhood unit as a scattered urban fragment

The project undertaken in Yemen offers insights into the structural design of urban development, where the issue of the urban housing deficit is perceived as not merely a matter of providing sites for house construction, but rather as the creation of a self-contained urban component complete with community amenities —and, ideally, proximity to employment opportunities. This idea of an 'urban fragment' was realised through comprehensive planning. From the initial experiments in Senegal in 1972 to subsequent ventures, such as the 1985 pilot in Owerri, Nigeria, it can be observed the construction of urban ensembles that integrated designs for neighbourhoods encompassing educational facilities, small businesses, health centres, markets, community centres, places of worship, public squares, playgrounds, and technical training centres.[fig.41] These elements were adapted to the diverse cultural contexts encountered globally.

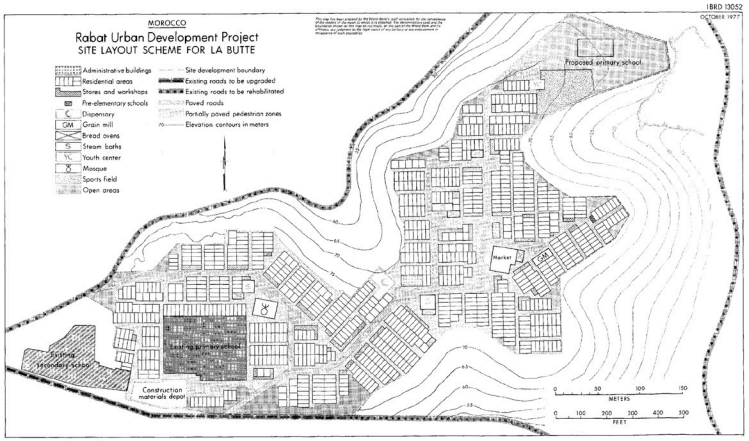
The neighbourhood unit approach emerged as a prominent aspect of the Sites and Services strategy in new urban projects, with concerted efforts made to incorporate communal facilities within Slum Upgrading programmes. These units, which echo the model proposed by Clarence Perry in 1929 and discussed in the second part of this thesis, were multiplied by the World Bank across various countries and scales. This ranged from modest clusters of single-family homes, as seen in Tanzania, Colombia, and Jamaica, to extensive schemes such as those proposed for Dominican Republic or Kenya.[figs.40-5]

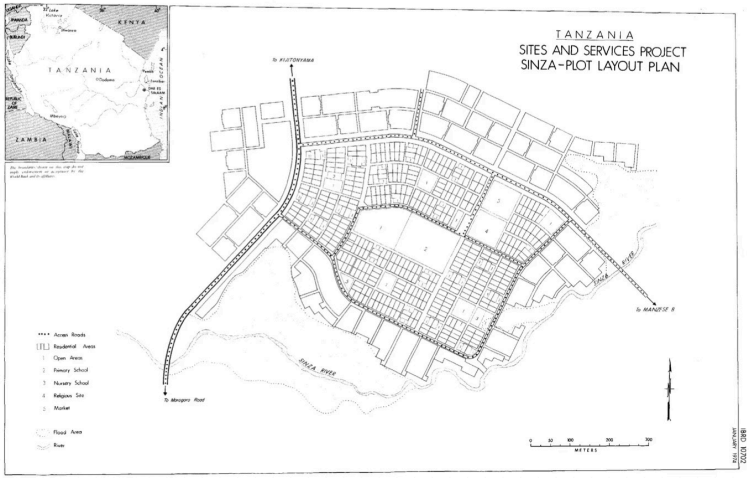
The layout of these neighbourhoods could exhibit morphological diversity, influenced by the distribution or configuration of blocks or superblocks, as observed in Owerri, or shaped by topographical considerations. Similarly, their programming varied according to contextual needs. For instance, religious structures such as churches or mosques were included where appropriate, and technical training facilities were tailored to bolster local productive activities. A case in point is the women's training centre in Jordan. World Bank documentation highlighted that women's engagement in the workforce was traditionally minimal, with a particular focus on women's education within project designs. It was deduced from preliminary studies that women's classes needed to be accessible, situated close to their residences, while men's courses were centralised only at the Quweismeh location.[21] Thus, training facilities for women were established across all project sites. At the time, reports noted that women constituted only ten per-cent of the economically active demographic.[22] The primary aim was to equip them with skills to aid in securing employment, thereby augmenting their family income. Reportedly, there was a pronounced preference among the beneficiaries to learn skills pertinent to traditional activities.[23]

21 World Bank, 'Jordan - Urban Project - Project Completion', 7.
22 Ibid., 95.
23 Ibid., 12.



Figs.42-4. Housing operations in Jamaica (top), Dominican Republic (bottom left), and Colombia (bottom right)
Sources: World Bank, 'Jamaica - Staff Appraisal', 143; World Bank, 'Dominican Republic - Sites Staff Appraisal', 95; World Bank, 'Colombia - Urban Staff Appraisal', 122.





Figs.45-6.Housing operations in Morocco (top), and Tanzania (bottom). Source: World Bank, 'Morocco - Rabat Staff Appraisal', 101; World Bank, 'Tanzania - National Staff Appraisal', 113.

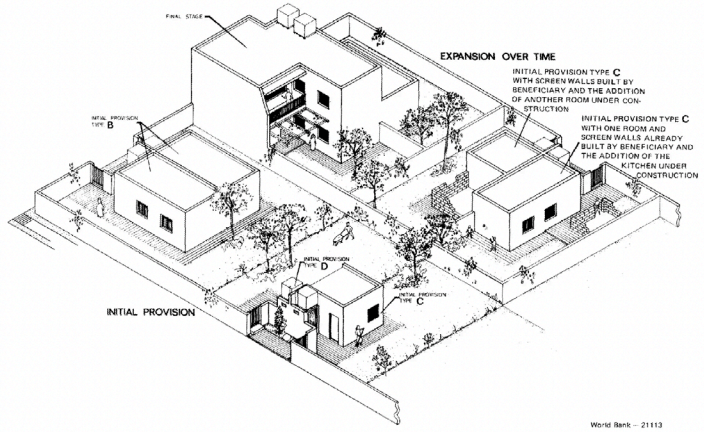


Fig.47. Housing operation in Jordan. Source: World Bank, 'Jordan - Urban Staff Appraisal', 14

In Sites and Services initiatives, the evolution of blocks and neighbourhoods was envisaged as a gradual process. This development could proceed through aided self-help construction by families or with the assistance of non-governmental, regional, or national governmental bodies, each contributing in varying capacities to the projects' objectives. As depicted in the axonometric representations of projects in India and Jordan, a phased block growth was anticipated, with several consolidation stages tailored to each unique scenario.[fig.47] In Jordan, the axonometric illustration presents a sequential progression: from an undeveloped site, to one including a sanitary core, and eventually to the addition of living spaces of varying dimensions, with provisions for future vertical expansion.

The incremental development of neighbourhoods —from public spaces, streets, and footpaths to communal amenities— served diverse purposes. Nonetheless, despite the comprehensive plans, a critique levelled at these urban initiatives was the delay in constructing essential facilities. As a result, neighbourhood completion often spanned several years.[24]

24 In the 1970s and 1980s, the Sites and Services projects were subject to extensive examination and harsh

Inside or outside the city

The location of World Bank-supported housing projects, particularly in terms of proximity to urban centres and employment opportunities, hinged on various factors. For instance, Sites and Services projects were often situated on city outskirts where land was most affordable, thereby minimising investment costs. Conversely, Slum Upgrading projects aimed to enhance the conditions of existing settlements, avoiding displacement of residents.

Each project required a review of the prevailing land market conditions and regulations, considering the World Bank's preference for families to own their plots individually. Establishing a connection to the urban infrastructural networks of the city was also crucial, ensuring basic urban living standards were met.

The endeavour to alter land tenure systems in various countries did not always align with the World Bank's aspirations. For example, in Mali, as per the institution's reports, outright land ownership was infrequent, with several entities distributing provisional occupancy certificates.[25] In the words of the World Bank's report, this informal situation was a hindrance to future land management and rational urban growth, 'not to mention the implicit threat to private investment and individual security'.[26] To address this, the World Bank suggested the creation of an autonomous entity within the Bamako Municipality, named CAFO-BA. However, this proposal —contingent on the introduction of a new real estate code facilitating clear land titles for families— never came to fruition. The World Bank observed that 'the Malian Government did not look on private property as particularly desirable or necessary'.[27]

critique. Detailed reviews of their planning, execution, administration, and outcomes are available in: Jan Van der Linden, *The Sites and Services Approach Reviewed: Solution or Stopgap to the Third World Housing Shortage?* (Aldershot: Gower, 1986).

25 World Bank, 'Mali - Urban Project - Project Performance', 4.

26 Ibid.

27 Ibid.

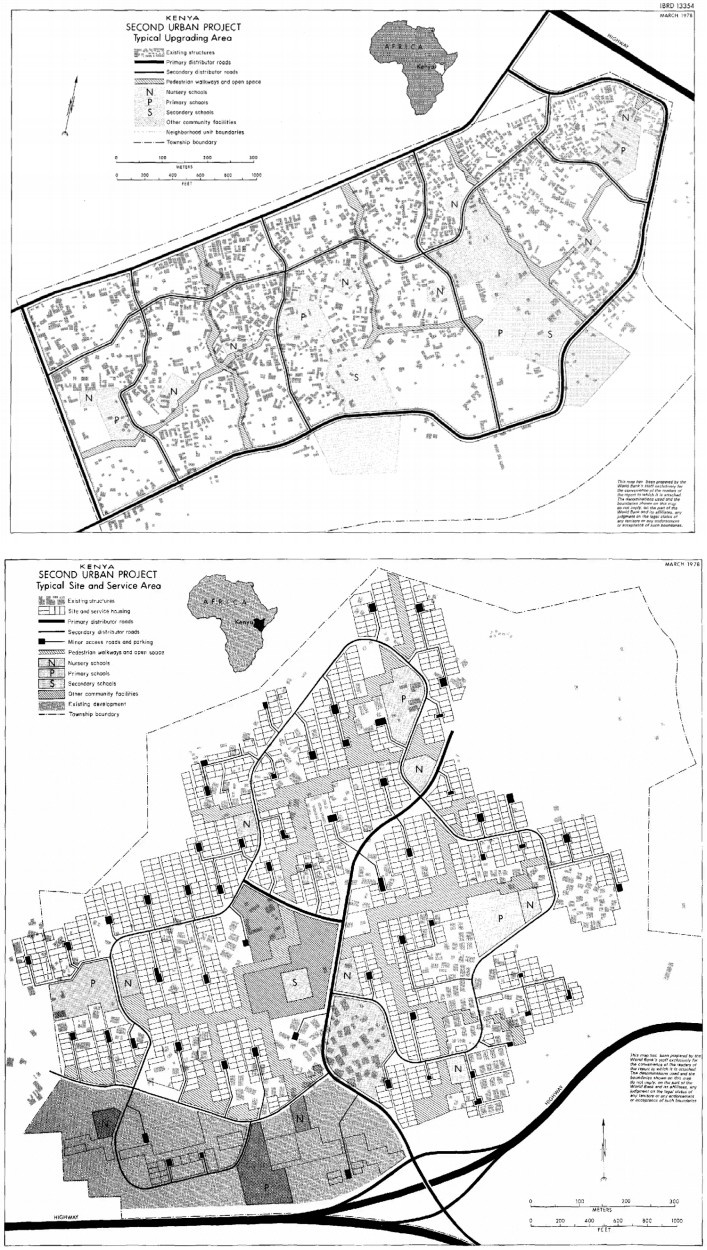


Fig.48. Slum Upgrading (top) and Sites and Services (bottom) operations in Kenya. Source: World Bank, 'Kenya - Second Staff Appraisal', 69,67.

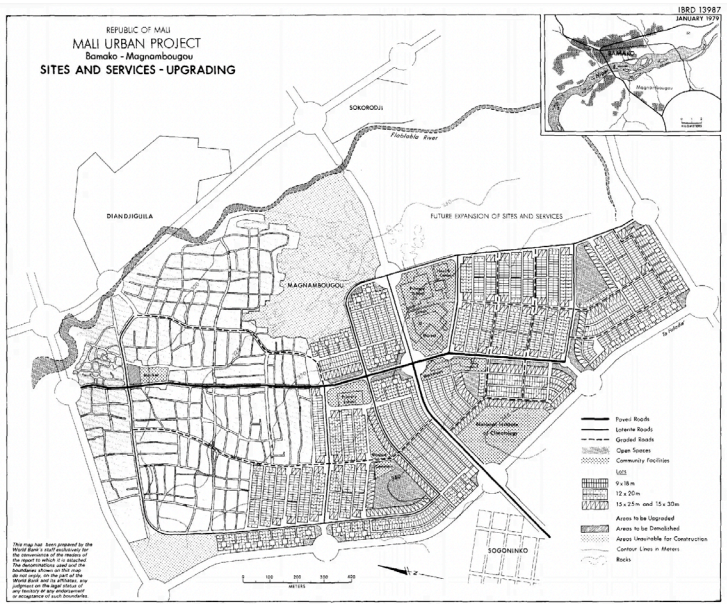
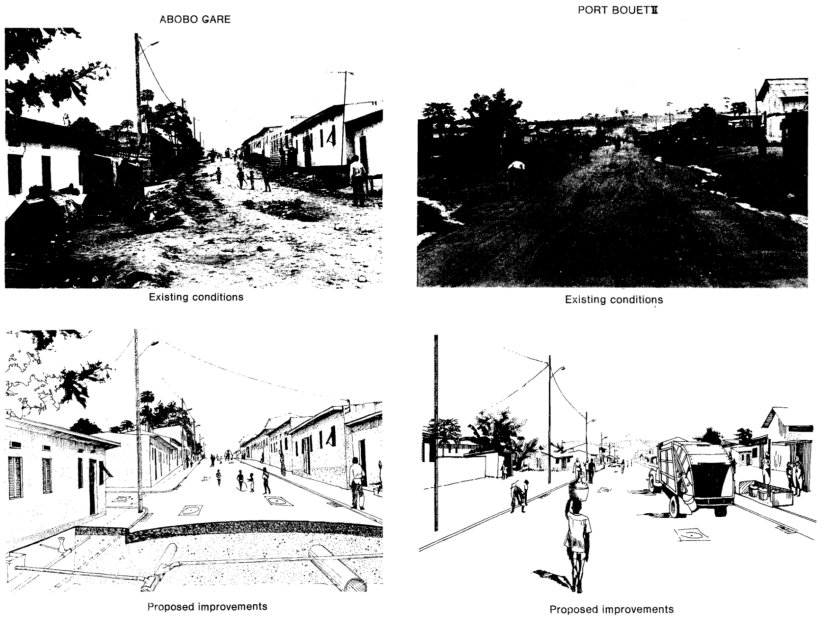


Fig.49. Housing operation in Mali. Source: World Bank, 'Mali - Urban Staff Appraisal', 83



Figs.50-1. Slum Upgrading projects in Ivory Coast. Source: World Bank, 'Ivory Coast - Urban Staff Appraisal', 153, 159.

The cartographic representations of the Sites and Services and Slum Upgrading projects in Kenya (1978), as well as the urban operation in Mali, illustrate the various morphologies and standardisations these strategies might assume.[figs.47-9] Kenya's project shows that within Slum Upgrading, the existing organic morphology of informal settlements is partially retained, suggesting selective demolitions and the integration of communal amenities. Conversely, Sites and Services projects reveal a more rigid urban grid.

In the context of Slum Upgrading, as shown in the 1976 Abobo Gare neighbourhood project in Abidjan, Côte d'Ivoire, infrastructure networks such as sewage and potable water systems are retrofitted within the constraints imposed by pre-existing dwellings.[figs.50-1]

On the other hand, Sites and Services necessitate a full deployment of infrastructure, including potable water, sewage, electrical grids, and waste collection points, as observed in the referenced project for Nigeria. Here, the three superblocks, initially peripheral to Owerri's urban centre, have been overtaken by the city's expansion over time.[fig.52-4]

In several instances, these urban development strategies have precipitated the outward expansion of city limits, serving as catalysts for future urban population growth. However, these demographic shifts can precipitate a range of outcomes. Notably, they may foster large enclaves of low-income residents, leading to social segregation with economically homogenous populations. Furthermore, the relocation strategies often disrupt existing labour networks, as families re-

Figs.52-4. Sites and Services project in Owerri, Nigeria in 1985 (top) and 2020 (middle and bottom). Source: Google Earth.

moved from informal settlements are distanced from their traditional employment sources. Displacement to different urban projects can also erode the social fabric and community cooperation that is produced in informal settlements. Additionally, within the framework of Slum Upgrading, there is a potential for gentrification, resulting in the displacement of the original residents.[28]

In 1972, Senegal became the inaugural context for the World Bank's Sites and Services initiative.[29] The discussion around the location of housing had significant implications for segregation, integration efforts, gentrification effects, and socio-economic biases.[30] Prior to this international intervention, the Senegalese government had initiated the relocation of some residents to Dakar's periphery to repurpose central land for commercial and high-income residential developments. This endeavour, however, proved economically unsustainable, and by 1970, Senegal solicited the World Bank's support to address the surging housing demand. With its history of sites and services type of projects dating back to 1965, Senegal was deemed an apt candidate for the World Bank's pioneering operation.[31]

The World Bank's project envisaged the development of 14,000 housing plots in the Cambérène sector, accompanied by 16 schools and four health centres.[fig.55] However, the escalating population density soon rendered these communal facilities inadequate.[32] Furthermore, there was a divergence in strategy: the government favoured subsidising middle-class housing, while the World Bank aimed to support the lowest-income brackets. This dichotomy provoked apprehension within the private sector over potential 'ghettoi-

28 Van der Linden, *The Sites and Services Approach Reviewed*; Rod Burgess, 'Helping Some to Help Themselves: Third World Housing Policies and Development Strategies', in *Beyond Self-Help Housing*, ed. Kosta Mathéy (London: Mansell, 1991), 75–94.

29 Francisco Quintana, Bárbara Salazar, and Melinka Bier, 'Fragmentos Urbanos de Guerra Fría en el "Tercer Mundo"', *Astrágalo*, no. 29 (2021): 207-31.

30 World Bank, 'Senegal - Sites and Services Project (English)', Staff Appraisal Report (Washington DC: World Bank, 26 April 1972), 121.

31 Alfred Van Huyck, Planning for Sites and Services Programs, Ideas and Methods Exchange Report No. 68 (Washington DC: USAID. Office of International Affairs, U.S. Department of Housing and Urban Development, 1971), 25-26.

32 Michael Cohen, 'Aid, Density, and Urban Form: Anticipating Dakar', *Built Environment (1978-)* 33, no. 2 (2007), 152.

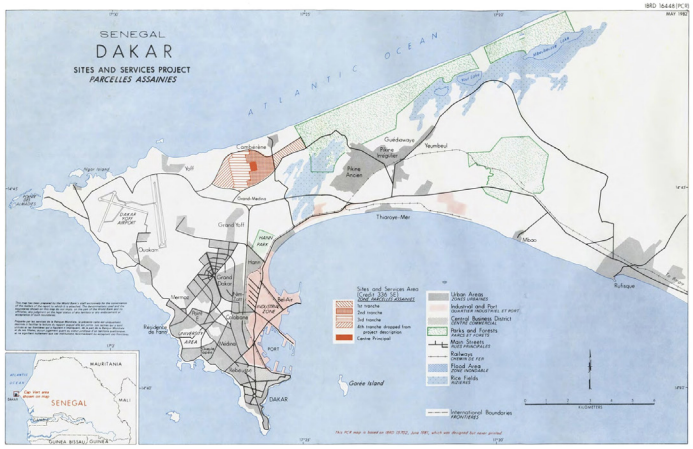


Fig.55. Sites and Services project in Senegal. Source: World Bank, 'Senegal – Sites and Services Project (Archives)', Project Completion Report (Washington: World Bank, 31 October 1983), 92, Project Completion Report - Senegal - Sites and Services Project - Credit 336 SE - Report 4768 - October 31, 1983, Folder ID 437631, WB.

sation', which might depreciate the value of Cambérène. Conversely, World Bank representatives contended that the project would attenuate social discord over time by affording the impoverished opportunities for employment and homeownership in a favourable location.[33]

By 1980, the area's land value had appreciated, partly due to infrastructural investments and the limited housing market for middle-income earners.[34] Consequently, some original beneficiaries capitalised on this upturn by selling their plots, inadvertently catalysing gentrification.[35] Thus, this operation served as a melting pot of ideas and a trial-and-error exercise, or 'learning by doing' as World Bank officials described it, given the myriad challenges encountered in aligning objectives, meeting deadlines and maintaining design standards.[36]

33 World Bank, 'Senegal – Sites Project Completion', 71.
34 Aprodicio A. Laquian, *Basic Housing: Policies for Urban Sites, Services, and Shelter in Developing Countries* (Ottawa: International Development Research Centre, 1983), 142.
35 Cohen, 'Aid, Density, and Urban Form', 153.
36 Michael A. Cohen, *Learning by Doing: World Bank Lending for Urban Development, 1972-82* (Washington DC: World Bank, 1983); Van Huyck, *Planning for Sites and Services Programs*, 25-26.

Settlers of remote landscapes

The predominant location for urban housing projects financed by the World Bank was within capital cities or primary urban centres, where the housing crisis was most acute. Yet, in certain instances, the World Bank advocated for broader population distribution across national territories. According to its reports, this was to mitigate risks associated with natural disasters, such as storms and earthquakes, or to foster the development of national industries, including mining, forestry, agriculture, and livestock. Such policies often necessitated the relocation of low-income populations from established urban areas to less densely populated regions, ranging from smaller towns to rural locales. These redistributive strategies attracted criticism for their potential social and environmental repercussions, both from external observers and within the World Bank itself.

In the wake of a large earthquake that struck Managua, Nicaragua, in 1973, resulting in the destruction of approximately 45% of housing and the displacement of over 200,000 individuals, the World Bank initiated a Sites and Services programme to catalyse national decentralisation through projects in 'secondary cities'.[37] Nicaragua, while geographically extensive, had historically concentrated its population in a limited area. The World Bank's intervention aimed to facilitate the permanent settlement of refugees in smaller towns, thus reducing vulnerability to seismic events in the capital and aligning with agricultural development plans for the country.[38]

Among other cases, in the mid-1970s, the World Bank supported Sites and Services projects in four secondary cities in Southern South Korea, particularly around the Gwangju region, to promote industrialisation and enhance employment in manufac-

37 World Bank, 'Nicaragua - Earthquake Reconstruction Project (English)', Staff Appraisal Report (Washington DC: World Bank, 20 April 1973), i.
38 World Bank, 'Nicaragua - Earthquake Staff Appraisal'; World Bank, 'Nicaragua - Agricultural Credit Project', Staff Appraisal Report (Washington DC: World Bank, 23 October 1973); Melinka Bier, 'Nicaragua "Verde"', Course paper (Ciudades de la Guerra Fría, Pontificia Universidad Católica de Chile, 2020).

Fig.56. Field of young palms, Pahang, Malaysia. c1970. In 1968, the International Bank for Reconstruction and Development of the World Bank Group approved funds to assist Malaysia's first large-scale land settlement and development scheme, known as the Jengka Triangle Program. A field of young palms in Pahang for palm oil production. Source: World Bank Group/Mary M. Hill

turing and mining sectors.[39] Of greater territorial extension was the project planned for Colombia. This country, characterised by one of Latin America's highest urbanisation rates at the time, had 70% of its population living in urban areas as of 1977.[40] Despite Bogotá being the capital and most populous city, over 90 urban centres housed populations exceeding 30,000. In this context, the World Bank's strategy extended to implement projects in 23 selected cities. Conversely, El Salvador, the smallest and most densely populated nation in Central America at the time, saw Sites and Services operations distributed between the capital and four secondary cities to encourage the development of regional centres.[41]

39 World Bank, 'Korea – Secondary Cities Regional Project (English)', Staff Appraisal Report (Washington DC: World Bank, 16 December 1974).
40 World Bank, 'Colombia - Urban Development Project (English)', Staff Appraisal Report (Washington DC: World Bank, 10 April 1978), v.
41 World Bank, 'El Salvador - Sites and Services Project (English)', Staff Appraisal Report (Washington DC: World Bank, 20 September 1974), 6.

Sites and Services projects were, in some instances, instrumental in pioneering the colonisation of remote areas, a movement partly paralleling the contemporary Green Revolution. William S. Gaud, then director of USAID, referred to this phenomenon in a 1968 address:

> These and other developments in the field of agriculture contain the makings of a new revolution. It is not a violent Red Revolution like that of the Soviets, nor is it a White Revolution like that of the Shah of Iran. I call it the Green Revolution.[42]

Gaud's words underscored a set of initiatives spanning the 1950s and 1960s aimed at bolstering agricultural production within developing nations: 'massive transfer of capital and technology from the industrial nations, particularly from the USA, first to the landed oligarchy and subsequently to agriculture-related industries and services'.[43] Robert McNamara, as president of the World Bank, acknowledged the potential environmental toll of intensive agricultural methods, yet strongly endorsed such endeavours.[44] As early as 1969, in a speech to his Board of Governors he stated:

> The green revolution is not simply a grab bag of miscellaneous farm techniques. It is a complete and coordinated agricultural technology. If we can succeed in marrying this technology to new programs of agricultural credit and marketing, we can definitely arrest the spread of famine that threatens the world's exploding population.[45]

42 William S. Gaud, 'The Green Revolution: Accomplishments and Apprehensions' (USAID, 8 March 1968).
43 Ernest Feder, 'McNamara's Little Green Revolution: World Bank Scheme for Self-Liquidation of Third World Peasantry', *Economic and Political Weekly* 11, no. 14 (1976), 532.
44 Michael Goldman, *Imperial Nature: The World Bank and Struggles for Justice in the Age of Globalization, Yale Agrarian Studies* (London: Yale University Press, 2005), 70-1; 84-7; World Bank, *Urbanization*, Sector Working Paper (Washington DC: World Bank, 1972), 25, 29.
45 World Bank, *The McNamara Years*, 57.

While the Green Revolution traditionally focused on commodities such as wheat, rice, and maize, under McNamara's leadership at the World Bank, there was a significant push towards another agricultural crop, such as the intensive cultivation of oil palm in Malaysia and Indonesia. This agricultural venture was paired with the displacement of low-income populations from urban centres to remote rural locations. Sites and Services projects were employed to facilitate access to housing for these relocated communities.[fig.56]

As of 1970, Indonesia was the world's fourth most populous nation, with approximately 130 million residents. Its population was unevenly distributed, with a staggering 90 million people residing in Java, Bali, Lombok, and Madura —merely 7 per-cent of the country's total land mass. World Bank assessments indicated that these areas exceeded ecologically sustainable population densities. Conversely, the expansive islands of Sumatra, Sulawesi, and Irian Jaya, despite their ample arable land, remained thinly populated.[46] In response, from 1976 to 1985, the World Bank financed 'transmigration projects' to relocate impoverished inhabitants from overcrowded islands to remote landscapes for colonisation and agricultural development. These initiatives, however, drew significant criticism, including from within the World Bank itself. Critics highlighted several adverse outcomes: the initiatives not only catalysed urban-to-rural migration of families but also resulted in the displacement of indigenous communities from their lands and led to environmental degradation, among other issues.[47]

In the aftermath of World War II, Malaysia emerged as the leading global palm oil producer, deriving from species introduced initially during British colonial period. The World Bank's strategy included the advancement of agribusiness through the resettlement of low-income urban families to new territories. Here, they were provided with a plot of land, complete with a dwelling and a house garden, and assigned additional acreage for farming.[48] On parcels ranging from one to four hectares adjacent to their settlements, these nascent smallholders deforested native rainforest areas to establish monoculture plantations for palm oil production. This strategy had multiple consequences: widespread deforestation resulted in a notable decrease in biodiversity and had a substantial effect on global greenhouse gas emissions, among others.[49]

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Figs.57-8. President Robert S. McNamara during trips to Indonesia (1968) and Malaysia (1978). Source: World Bank Group/William D. Clark

46 World Bank, 'Indonesia - Transmigration and Rural Development Project (English)', Staff Appraisal Report (Washington DC: World Bank, 10 June 1976), 3.

47 World Bank, 'Indonesia - The Transmigration Program in Perspective (English)', A World Bank Country Study (Washington DC: World Bank, July 1988); Sharma, *Robert McNamara's Other War*, 121; Carlos Díaz and Francisco Quintana, *Postcard 'Colonizadores de paisajes remotos'*, 21 December 2021, 17 x 11 cms, 21 December 2021.

48 World Bank, 'Malaysia - Johore Land Settlement Project (English)', Project Performance Audit Report (Washington DC: World Bank, 13 December 1982).

49 Sharma, *Robert McNamara's Other War*, 120; Carlos Díaz and Francisco Quintana, *Postcard 'Huertos familiares y monocultivos de exportación'*, 21 December 2021, 17 x 11 cms, 21 December 2021.

Figs.59-60. McNamara at the site of a Bank-supported urban project at Villa El Salvador on the outskirts of Lima, Peru (1976). Source: World Bank Group. Robert McNamara with General Hugo Banzer in Bolivia signing a loan for 9.5 million (1976) Source: El Diario, March 9, 1976.

From 1972 to 1981, the World Bank implemented over 350 housing operations across a diverse geographical range. These projects spanned twelve Latin American countries, extending from Bolivia in the southern cone of South America, through most of the countries of Central America, to Mexico in North America.[fig.59] In Africa, the World Bank's presence extended to fifteen nations, intersecting predominantly with former British colonies, including Egypt, Nigeria, Kenya, Zambia, Tanzania, Botswana, and Lesotho. Eight Asian countries, some with significant populations, were targeted for project development, notably India and Indonesia. In the latter, there was collaboration during the dictatorial periods of Suharto,[50] as well as Ferdinand Marcos's regime in the Philippines.[51] [fig.61]

50 Sharma, *Robert McNamara's Other War*, 39-40.
51 Scott, *Outlaw Territories*, 238-338.

Fig.61. Robert McNamara with Imelda Marcos, then Governor of Metropolitan Manila, at the loan signing for Philippines Manila urban development project (1976). Source: World Bank Group/Edwin G. Huffman.

The current World Bank archive, along with documents awaiting declassification, provide comprehensive quantitative and qualitative accounts of each nation and its cities, serving as a starting point to examine the dissemination of housing concepts and development narratives across varied contexts. This wealth of information also facilitates an analysis of the projects' multifaceted impacts, assessing commonalities and differences or documenting the reception and adaptation of these initiatives in disparate locales, thus contributing new perspectives and augmentations to a project of a global scale.

To this end, the following is a review of the inter-American trajectory of a World Bank urban operation in Bolivia, tracing its evolution from its inception under Hugo Banzer's dictatorship in the 1970s —marked by Robert McNamara's visit to La Paz— through to the mid-1980s.[fig.60] Bolivian institutional archives, international and domestic newspapers, and scholarly literature enrich

the World Bank's records. Furthermore, personal files and interviews with Bolivian architects who contributed to these projects provide additional depth. The aim is to enhance the history of a project that, in a way, was drawn by three hands. The next chapter details a history that is intricately crafted by both global and local actors, as delineated by Adrián Gorelik's concept of a 'back-and-forth journey' or 'crossed gazes' between Latin America and the US. It will be observed how the housing operation in Bolivia integrated learning from experiences in Bogotá through the CINVA, engagements with foundations in San Salvador, and the participation of faculty from MIT in Cambridge, US, among other American influences.

4

Sites & Services in El Alto and Slum Upgrading in La Paz, Bolivia

World Bank in Bolivia

Bolivia received its first World Bank loan in 1964, sixteen years behind neighbouring Chile, which had been the first to benefit from the Bank's assistance to developing countries in 1948. During the tenure of President Víctor Paz Estenssoro (1960-64), the Bank funded two electricity projects in Bolivia. This endeavour continued under the leadership of René Barrientos Ortuño (1964-69), with a total investment of $22.4 million directed towards electric power. This initiative had the twofold aim of supplying urban areas and the pivotal mining sector.[1] Additionally, the agro-industry received a $2 million investment under Barrientos.

In the midst of Bolivia's political instability, which spanned the terms of office of Luis Adolfo Siles (1969), Alfredo Ovanda (1969-70) and Juan José Torres (1970-71), the World Bank approved three more loans. The most substantial of these was a $23.3 million allocation for a gas pipeline to Buenos Aires in Argentina.[2] The remaining two, earmarked for agribusiness, amounted to $8.2 million. As a result, between 1964 and 1971, a total of $55.9 million was approved across seven loans. This increase in World Bank support to Bolivia coincides in part with the initial years of Robert McNamara's leadership (1968-81), marked by his drive to bolster the international institution's funding and broaden its footprint in developing nations.

1 World Bank, 'Bolivia - Appraisal of the Santa Isabel Project Empresa Nacional de Electricidad S.A. (ENDE)', Staff Appraisal Report (Washington DC: World Bank, 8 April 1969); World Bank, 'Bolivia - Power Program (English)', Staff Appraisal Report (Washington DC: World Bank, 23 June 1964).

2 World Bank, 'Bolivia - Appraisal of the Company Yacibol Bogoc Transportadores Gas Pipeline Project (English)', Staff Appraisal Report (Washington DC: World Bank, 22 May 1969).

Confianza y fe en el porvenir de Bolivia

Fig.62 'Confidence and faith in Bolivia's future' – a caricature depicting a Bolivian greeting Robert McNamara during his visit to the country, as published in the editorial of *El Diario* newspaper. Source: Newspaper *El Diario*, 9 March 1976.

Fig.63 'In a gesture of gratitude to the government and the World Bank, peasants from the Ingavi province presented General Banzer and Mr. McNamara with traditional woolen ponchos and 'iluchus''. —McNamara is on the left, with Banzer on the right. Source: Newspaper *El Diario*, 9 March 1976, p.3. Translated by author.

When Hugo Banzer came to power in 1971, World Bank loans increased 4.7 times. Sixteen projects were approved during his eight-year term (1971-78), with a cumulative investment of $262.7 million. McNamara himself visited Bolivia during this period to endorse a rural initiative and bolster the agro-industry.[figs.62-4] Preceding this, a New York Times article had cited Banzer's desire to personally present development proposals to McNamara, soliciting his cooperation.[3]

Throughout Banzer's dictatorship, the World Bank diversified its activities in Bolivia. Projects spanned sectors such as mining, road infrastructure, rail transport, electricity, rural improvement, educational and vocational training, and aviation. Notably, the Bank also financed an Urban Development project, injecting $17 million —to provide historical context, housing consultant Charles Abrams had previously sought $1 million in 1959, and between 1963 and 1967, the IDB had contributed $9.5 mil-

3 NN, 'McNamara to Visit Bolivia', *The New York Times*, 5 October 1975.

EL DIARIO

Fundado por José Carrasco el 5 de Abril de 1904

Año LXXII Nº 25.408 La Paz, Lunes 8 de Marzo de 1976 12 Páginas $b. 2.-

Robert McNamara llegó ayer a La Paz

Hoy firmará crédito por $us.9.500.000.-

Bolivia ingresará al Club de París

Fig.64 Headline from 'El Diario' announcing, 'Robert McNamara arrived yesterday in La Paz. Today he will sign a loan for US$9,500,000'. The photograph shows McNamara alongside Finance Minister Carlos Calvo. Source: Newspaper *El Diario*, 8 March 1976.

lion under the Alliance for Progress. The urban initiative aimed to build or improve housing conditions and boost employment for the economically disadvantaged, mainly through Sites and Services projects in El Alto, slum upgrading and urban improvements in the hillsides of La Paz, offering credit facilities to local artisans and burgeoning businesses, and the establishment or improvement of food retail markets.[4]

After the fall of the Banzer government, between 1979 and 1980, the World Bank approved five additional loans for Bolivia, amounting to $17.1 million. Subsequently, there was a noticeable lending hiatus that lasted until 1986. This interruption in funding was attributed to Bolivia's difficulties in repaying its previous debts and its struggle with a tumultuous economic phase characterised by soaring inflation.[5] Concurrently, the rise to the presidency of Hernán Siles Zuazo in 1982, representing the Unidad Democrática y Popular [Democratic and Popular Unity] —a coalition of left-wing parties, including the Bolivian Communist Party—, may also have influenced this hiatus.

A similar gap in World Bank lending occurred in Chile between 1970 and 1973, when socialist Salvador Allende, also elected with the support of the country's communist party, was President.[6] Alfonso Inostroza, then-president of the Central Bank of Chile, asserted in a World Bank annual meeting that the Bank's reluctance to grant loans to Chile was due to US influence: 'the World Bank acted not as an independent multinational body at the service of the economic development of all of its members, but in fact as a spokesman or instrument of private interest of one of its member countries.'[7] Notably, World Bank loans to Chile resumed in 1974, mere months post the coup led by Augusto Pinochet.

The World Bank restarted its projects in Bolivia in 1986, coinciding with the return of Victor Paz Estenssoro to the presidency. Estenssoro's earlier term, two decades prior, had been the first Bolivian government to secure loans from the Bank. In his fourth term as President (1985-89), Estenssoro endorsed policies that resonated with the neoliberal paradigm advocated by the World Bank at the time.[8] These policies also aligned with the global neoliberal directives propagated during the tenures of figures like President Ronald Reagan in the US (1981-89), Prime Minister Margaret Thatcher in the UK (1979-90), and the Pinochet dictatorship in Chile (1973-90).[9] Throughout Estenssoro's term, the World Bank backed thirteen projects, accumulating an investment of $350 million.

4 World Bank, 'Bolivia - Urban Development Project (English)', Staff Appraisal Report (Washington DC: World Bank, 9 September 1977).

5 World Bank, 'Bolivia - Urban Development Project (English)', Project Completion Report (Washington DC: World Bank, 1 June 1992), 5, 9.

6 Sharma, *Robert McNamara's Other War*, 102-6.

7 NN, 'Chile Criticizes World Bank Policy', *The New York Times*, 29 September 1972.

8 Ramsamy, *World Bank*, 170-84

9 Harvey, *A Brief History*.

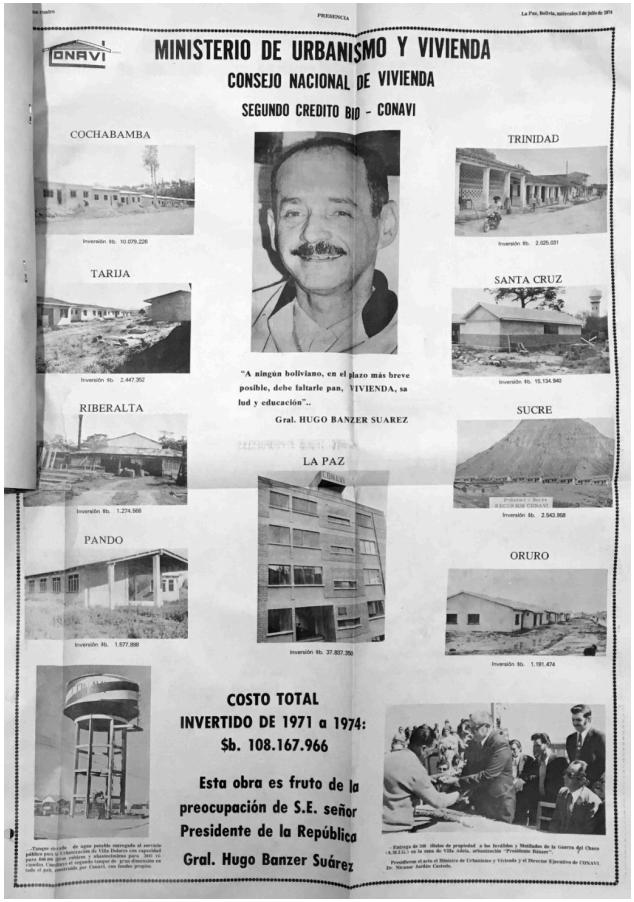


Fig. 65 Advertising insert in the newspaper Presencia with the general Hugo Banzer promoting the housing built in Bolivia thanks to the loan granted by the IDB in the 1960s. Source: Newspaper Presencia, 3 July 1974.

World Bank's urban development operation in La Paz

During his regime, Hugo Banzer highlighted in several newspapers the start of housing projects financed by the second IDB loan. This campaign operated under the slogan, 'no Bolivian should lack bread, housing, health and education in the shortest possible time'. Clippings from Bolivian press in 1974 depicted apartment blocks in La Paz, individual houses in cities such as Santa Cruz, Cochabamba, and Sucre, and the establishment of multiple modest health centres throughout the country.[fig.65] The inserts also showcased an elevated water storage facility in Villa Dolores designed to cater to two thousand households and the inauguration of residences in Villa Adela —an area earmarked for one of the World Bank's Sites and Services initiatives. Despite the second IDB loan being sanctioned in 1967, the publicity accentuated the 108 million bolivianos disbursed between 1971 and 1974, concluding with the text 'this effective work is the result of the concern of His Excellency the President of the Republic, General Hugo Banzer Suárez'.[10] After the IDB financing ended, the Banzer administration commenced negotiations with the World Bank for new housing and urban development projects. This culminated in an agreement in 1977, with funding allocated from 1978 until 1986. The duration, however, was punctuated by challenges, revisions, and postponements. The agreement was forged through dialogues involving World Bank representatives, personnel from the Bolivian Ministry of Housing, agents from CONAVI, and employees of the La Paz Mayor's Office, among other stakeholders.

It is worth noting that the housing development negotiated with the World Bank was not the only urban and territorial development initiative explored during Banzer's mandate with the advice of international institutions. In June 1977, a decree

10 Ministerio de Vivienda y Urbanismo. Gobierno de Bolivia, 'Segundo Crédito BID CONAVI', *Diario Presencia*, 9 July 1974.

sanctioned the inception of exploratory assessments for the establishment of two new urban centres in northern Bolivia.[11] By September, Doxiadis Associates International —an entity established by the then late Greek architect Constantinos A. Doxiadis— was invited to participate in an international competition organised by the National Pre-investment Institute under the aegis of the Bolivian Ministry of Planning and Coordination. Their proposal was selected in May 1978, and they submitted their comprehensive analysis in December of the same year. This analysis appraised various sites in northern Bolivia with a vision to spearhead colonisation and facilitate urban expansion.

The planning process aimed to formulate development alternatives for a 30-year horizon, extending projections up to 2010.[12] One of the main objectives was to foster greater integration between the northern territories and the nation as a whole. As articulated in the report: 'the settlement of the North has to be attacked on two fronts simultaneously': first, by augmenting the current urban centres and prioritising them for the introduction and attraction of novel economic ventures; and second, by promoting an integrated rural development, which would involve the settlement of untouched lands. The envisaged service hubs, introduced at the initial stages, would eventually evolve into substantial urban locales.[13] The targeted region for this development drive was Beni, with population projections for 2010 set at 2.45 million inhabitants. This demographic expansion would necessitate an influx of approximately 1.55 million individuals to the northern territory.[14] To accommodate this surge, plans were laid out to create roughly 683,000 new job opportunities.[15] These roles were anticipated to predominantly lie within the realm of primary production, with a

11 Doxiadis Associates International, 'Study for the Development of the Northern Part of Bolivia', Preliminary report, December 1978, 1, Archive Files 25248, Constantinos A. Doxiadis Archives.
12 Ibid., 173-4.
13 Ibid., 177.
14 Ibid., 222-5.
15 Ibid., 207.

significant focus on livestock breeding, complemented by a diversified agricultural landscape.[16]

The report written by Doxiadis Associates does not allude to it, but Bolivian architect Juan Carlos Barrientos correlates this developmental project with a proposition to welcome immigrants from regions including Namibia, Rhodesia (now known as Zimbabwe), and South Africa into Bolivia.[17] Barrientos also pointed out that this migratory plan, upon its disclosure, faced opposition from the La Paz Department of the Colegio de Arquitectos [Bolivian Architects' Association]. Building on insights shared by academic Alvaro Cuadros, the underlying intention appeared to revolve around facilitating the mass migration of individuals of European descent from a conflict in Rhodesia to Bolivia's northern territories.[18] Ultimately, the initiative was not carried out. Regrettably, as noted by Barrientos, the relevant documents once archived in the library of the Colegio de Arquitectos have since vanished. Similarly, the documents found in the Constantinos A. Doxiadis Archives lack the images, and a search in other Bolivian repositories also proved fruitless.

Returning to the World Bank, the inception of the international institution's urban operation in Bolivia can be traced to July 1975, a year following the conclusion of the IDB loan. In this month, representatives from Bolivia convened with Bank officials in Caracas, Venezuela, in the context of Latin America's regional preparations for the UN Habitat I conference. During these deliberations, Donald Strombom, the Division Chief of the World Bank's Transport and Urban Projects Department, engaged with Bolivian officials including the Undersecretary of Housing and the head of the Bolivian Housing Department. A memorandum detailing this engagement underscored the recent establishment of

16 Ibid., 225.
17 Saravia et al., *Alfonso Frías*, 232
18 Alvaro Cuadros, *Ciudad y Territorio. La construcción del espacio nacional* (La Paz: Corporación Holandesa en Bolivia, 1996), 192-200.

the Bolivian Housing Bank (BANVI) in 1974. Also, it highlighted an observation that had earlier intrigued Charles Abrams: 'It appears that one of the unusual characteristics of residents in the Altiplano is their tradition as good construction people. Over the past century, they have developed unique construction techniques and have constructed adobe houses that have withstood the elements.'[19]

By November 1975, an exploratory mission, including Donald Strombom and Mario Rothschild —later the project's Chief of Mission— embarked on a Bolivian visit and drafted initial reports. This mission laid the foundation for a collaborative endeavour between World Bank experts, such as architect George Gattoni —who had prior engagements in El Salvador and had collaborated on the Urban Settlement Design group with Horacio Caminos— and several Bolivian central and local government representatives. One local official was Walter Murillo Salcedo, the then head of supervision at CONAVI. Between March 1976 and February 1977, multiple site visits were made.[20] During these visits, three alternatives for the Sites and Services project were designed, including one by CONAVI under the direction of local architect Jaime Murillo Palacios. This design was selected and subsequently worked on by Horacio Caminos' USDP team, to be finally implemented back in La Paz by local architects such as Ranulfo Balderrama, among others, with adjustments from World Bank architects —a project finally drawn by three hands, in an inter-American trajectory of ideas. The formal agreement between Bolivia and the World Bank was ratified in November 1977, and the loan was activated in June 1978.

This initiative was conceptualised in response to Bolivia's prevailing housing crisis. The decade between 1965 and 1975 witnessed Bolivia's urban populace surge from 1.3 million to 1.9

19 R. A. Sison, 'Office Memorandum to Files "BOLIVIA - Proposed Sites and Services/Upgrading Project"', Office Memorandum, 14 July 1975, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 1, Folder ID 1170972, WB.

20 World Bank, 'Bolivia - Urban Development Project (English)', Staff Appraisal Report (Washington DC: World Bank, 9 September 1977), 1.

million, accounting for an increase from 30.5% to 34% of the total population. Conversely, the rural demographic declined from 3 million in 1965 to 2.65 million by 1976. The employment landscape also underwent transformation. While the agricultural sector, which constituted 66% of total employment in 1965, diminished to 62% by 1975, sectors like manufacturing, energy, transport, and commerce experienced annual growth rates of 3.5%, 3.2%, 3.3%, and 3.6%, respectively. La Paz, with a population of 655,000 in 1975, was the epicentre of urban concentration and projected a growth trajectory reaching 750,000 by 1980. Over a span from 1950 to 1976, urban growth rates in cities such as La Paz, Cochabamba, and Santa Cruz were recorded at 3.5%, 3.9%, and 7.3% respectively.[21]

The World Bank's report underscores that, during the Banzer administration, housing was prioritised as a critical sector.[22] In alignment with this emphasis, BANVI was instituted in 1974 with a mandate to foster and finance affordable housing and urban infrastructure, amplifying financial outreach to the most economically vulnerable segments. However, despite these initiatives, the housing deficit persisted. World Bank assessments indicate that while there was an aspiration to construct 10,000 housing units annually, the combined public and private sectors only managed to produce between 1,500 and 2,300 units each year. Accompanying this housing shortfall was a tangible deprivation of essential services. A mere 57% of the urban populace could access potable water —predominantly via standpipes— and a scant 23% had sewerage connections.[23] Walter Murillo Salcedo, in a 1975 publication catalogued in World Bank records, asserted that community facilities were either conspicuously absent or in a state of disrepair where they did exist.[24]

21 World Bank, 'Bolivia - Urban Staff Appraisal', 2.

22 Ibid., 4.

23 Ibid., 4.

24 Walter Murillo Salcedo, *Aspectos de vivienda y marginalidad* (La Paz, 1975), 3.

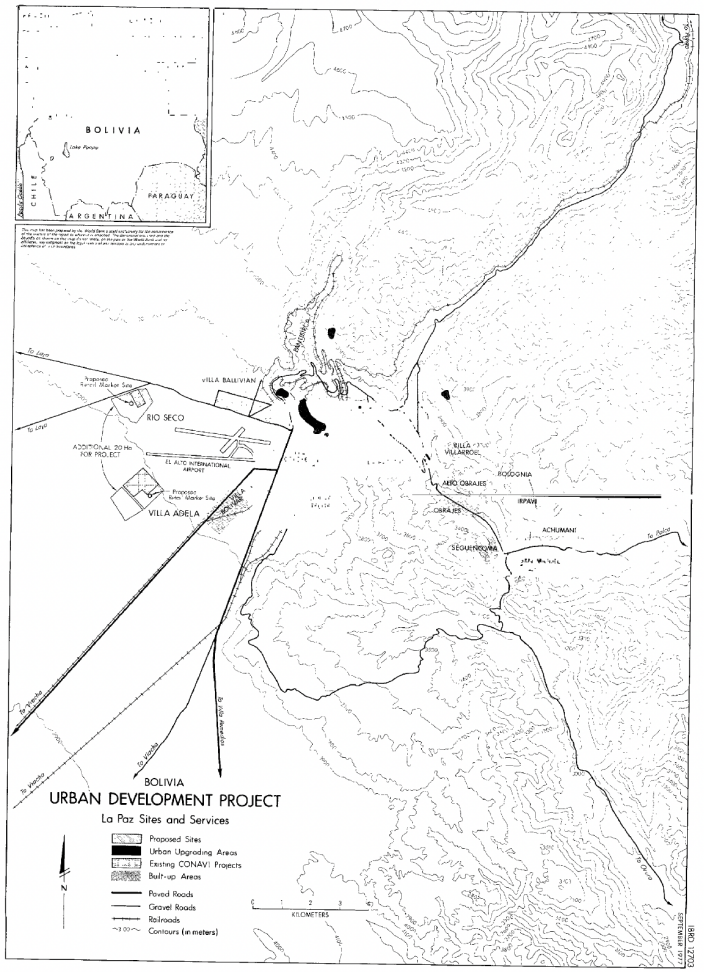


Fig. 66 Location of Sites and Services projects in El Alto and Urban Upgrading areas on the hillsides of La Paz. Source: World Bank, 'Bolivia - Urban Staff Appraisal', 143.

The World Bank Urban Development initiative for Bolivia had clear aims: to demonstrate the feasibility of providing essential services to low-income groups at affordable costs, to increase replicability and avoid subsidies; expand job opportunities and the economic participation of artisans and small-scale entrepreneur.[25] Embedded within these objectives was an ambition to illustrate how substantial investments channelled into such ventures could be recouped, facilitating the scalability and replication of these programmes.[26] Also, an integral component of this operation was to strengthen existing institutional frameworks through technical support to both BANVI and CONAVI.[27]

The World Bank's preliminary project delineated the following methodologies based on aided self-help to achieve the aforementioned objectives:

> (a) sites and services, community facilities, and construction materials credits for an estimated 5,525 families, and another 142 industrial/commercial plots in El Alto of La Paz.
> (b) urban upgrading (including some community facilities) and construction materials credits for about 4,500 households in the marginal settlements surrounding the La Paz city center.
> (c) construction of five new food retail markets in low-in come areas of La Paz.
> (d) establishment of a credit line to benefit artisans and small-scale enterprises, primarily in the areas of the project's sites and services and upgrading components, expected to directly provide about 1,560 jobs.
> (e) provision of technical assistance required for the efficient implementation of this project and for the preparation of similar future programs in La Paz and other parts of the country.[28] fig.66

25 World Bank, 'Bolivia - Urban Staff Appraisal', 9.
26 Ibid., i.
27 Ibid., 9.
28 Ibid., ii.

In Bolivia, the intention behind the urban development operation was twofold: firstly, to legitimise the residential status of the economically disadvantaged through the proliferation of homeownership; and secondly, by extending credit to artisans and small-scale enterprises, the goal was to introduce a novel mechanism that would 'reach and gradually incorporate hitherto marginal and subsistence entrepreneurs into the market economy of the country'.[29] The World Bank documents underscore several of the nation's intrinsic strengths, mirroring observations Abrams made as early as 1959. The reports again highlight 'the unusually high building skills of the local population, the availability of local construction materials, and the strong and cohesive community links that have traditionally characterized low-income groups in Bolivia.'[30]

Bolivia was granted a twenty-year tenure for the repayment of the $17 million loan. The burden of cost recovery was primarily placed upon the residents, with the expectation that they would repay the loan in monthly instalments. Exemptions were made for expenses related to schools and technical assistance programmes —given that the latter was 'designed to strengthen institutional capacities benefiting a much larger population'[31]— and their costs could be recovered from national budget.

*

According to World Bank assessments, La Paz's urban expansion was primarily confined to the El Alto region, although some affluent sectors of the population were gradually migrating southwards, following the contours of the valley.[32] figs.67-8 Earlier segments of this dissertation recounted Abrams's vision of El Alto as a prospective urban growth area in the 1950s, a vision which, in the following decade, received a financial boost from the IDB in the

29 World Bank, 'Bolivia - Urban Staff Appraisal', iii.
30 Ibid., 9.
31 Ibid., iii.
32 van Lindert and Verkoren, 'Segregación residencial'.

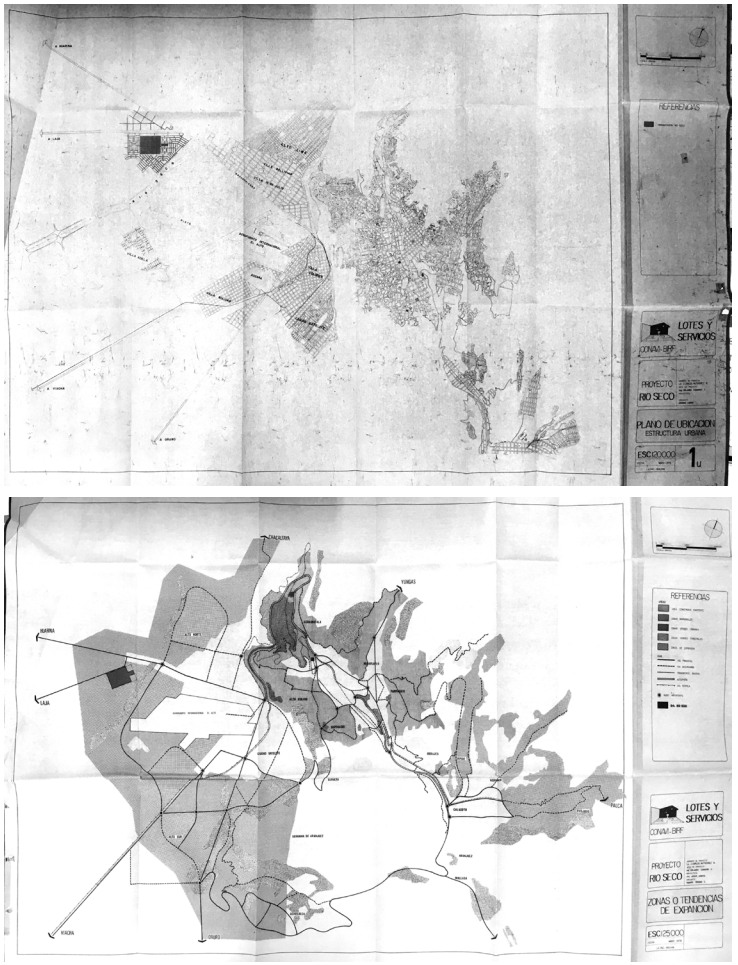


Fig. 67 CONAVI & World Bank map (May 1979) illustrating existing and proposed urban developments in El Alto and La Paz. Highlighted at the top in dark grey is the Río Seco Sites and Services project sector. Below this is Villa Adela —a Sites and Services project that was not completed— and to the right of the airport is Ciudad Satélite. Source: MOPSV.

Fig.68 CONAVI & World Bank map (May 1979) depicting the expansion zones of La Paz in grey. The large area on the left is El Alto, where the Río Seco Sites and Services project is marked in dark grey (top left). On the right side of the map is Calacoto, the location of the San Miguel housing project —this project anticipated growth towards the valleys south of La Paz. Source: MOPSV.

form of the Ciudad Satélite initiative. Conversely, the valley slopes of La Paz witnessed the sporadic emergence of informal settlements. These settlements, both precarious in nature and sited hazardously, became the focus of the World Bank's urban and slum upgrading initiative. Nevertheless, any further expansion on these slopes was deemed unfeasible, and areas like Calacoto, located in the southern recesses of La Paz's valley, remained absent from these reports.

The Sites and Services endeavours were earmarked for two distinct locales within El Alto: Río Seco and Villa Adela. These projects were envisaged to bolster urban developmental initiatives, laying the groundwork for a cohesive urban fabric that future private urbanisations would complement. Out of these, only Río Seco came to fruition, with an additional Sites and Services neighbourhood integrated during the project's lifecycle, managed by BANVI in Quiswaras. The Villa Adela initiative was subsequently reconfigured, focusing primarily on infrastructural improvement within the CONAVI districts in the vicinity.

Urban and Slum Upgrading in La Paz hillsides

The initial blueprint for Bolivia's urban upgrading, jointly conceptualised by the World Bank's Urban Projects Department in collaboration with local stakeholders in September 1977, was devised to cater to 4,500 households in La Paz's economically challenged neighbourhoods. This initiative primarily revolved around delivering essential infrastructure, an array of urban amenities, and facilitating access to construction material credits. Reflecting on this endeavour, the project's audit report authored by the World Bank staff in 1992 observed, 'even with the cost recovery problems, when assessed in light of the political and socio-economic environment which prevailed during its implementation, the achievements of this project are remarkable'.[33] Exceeding its initial projections, the

33 World Bank, 'Bolivia - Urban Staff Appraisal', iii.

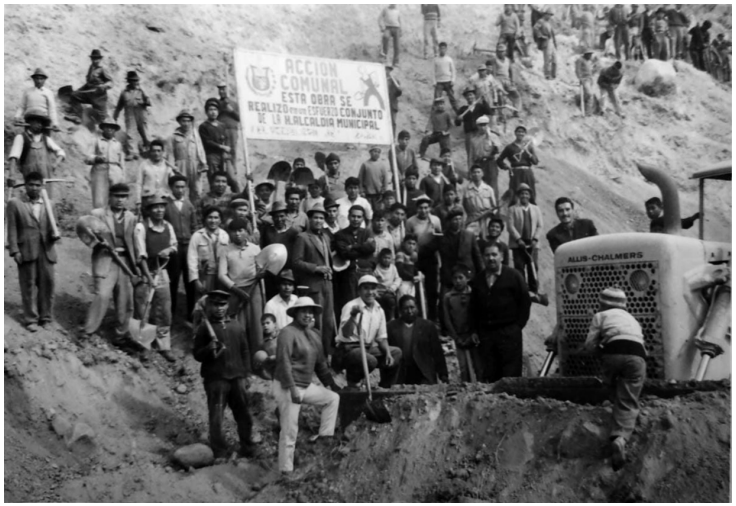
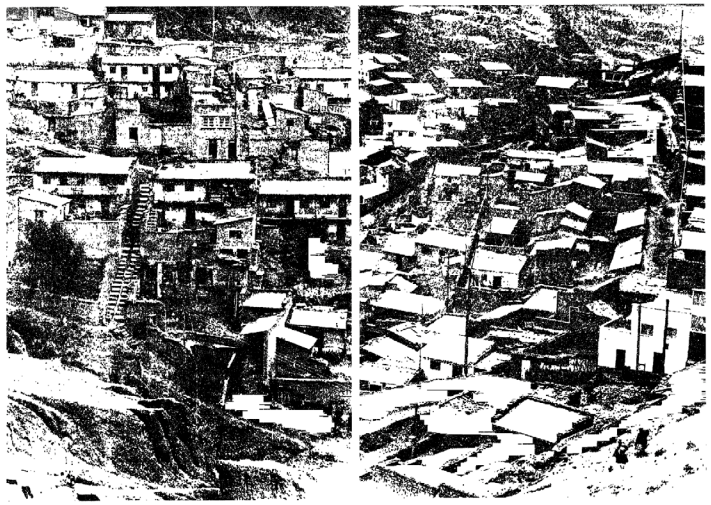


Fig. 69 The sign reads: Acción Comunal. This work was carried out in a joint effort with the Honorable City Hall. Source: Jorge Rivera Salazar personal files.

urban improvement endeavour impacted an area of 1,500 hectares and engaged over 20,000 households, a figure that quadruples the original estimates. Additionally, the expertise and insights garnered were disseminated to nations like Guatemala and Ecuador.[34] Aligning with developmental discourses congruent with the World Bank's strategic directives of the period, this initiative successfully served the most economically vulnerable population.

It is worth noting that while the World Bank had been implementing urban and slum upgrading programmes in several developing countries for years, its Bolivian adventure encountered organised local actors who already had experience in community work. Programmes such as Acción Comunal contributed significantly to this pre-existing ecosystem.[fig.69] This initiative, promoted in the 1960s by Bolivian architects such as Guillermo Sanjinés Ro-

34 World Bank, 'Bolivia - Urban Development Project (English)', Project Completion Report (Washington DC: World Bank, 1 June 1992), 10.



UPGRADING COMPONENT: Sagrado Corazon area's topography requires stabilization of footpaths, streets and embankments. Some improvements have been made by the community(center left); most streets have major access and erosion problems (extreme right).

UPGRADING COMPONENT: The Sagrado Corazon and Tembladerini areas in La Paz. Note steep slopes on which dwellings are well adopted. Proximity to city's commercial center (top of photograph on right) is excellent.

Figs. 70-1. Photographs in the World Bank reports depict La Paz settlements on slopes before the commencement of Slum Upgrading projects —original images for higher quality were unavailable. Source: World Bank, 'Bolivia - Urban Staff Appraisal', 58,59.

jas and later championed by figures such as Jorge Rivera Salazar, aspired to foster a comprehensive community engagement in which 'people participate fully, not only with their physical effort'.[35]

The multifaceted components of the World Bank's urban improvement strategy encompassed the augmentation of water and sewage infrastructure, refinement of waste management systems, enhancement of walkways and roads, and the establishment of shared facilities.[36] A key point highlighted in the report was the imperative to consolidate land tenure for all affiliated inhabitants. In addition, a scheme was proposed to offer credit for building materials to those who were inclined to self-help in home improvement, with an expected coverage of some 4,500 households.[37] The terms set for individual loans covered fifteen years with an annual interest rate of ten per cent. Conversely, credits for construction materials ranged from one to five years, also with a similar interest rate.[38] Contracts for potential beneficiaries were established with Acción Comunal, which would oversee project implementation in close collaboration with the community through the Juntas Vecinales [neighbourhood councils]. Elected community leaders would be entrusted with functions covering the implementation, administration, and maintenance of the project.[39]

Six distinct areas, accommodating the 4,500 families, were originally earmarked for urban enhancement. These were predominantly situated on La Paz's slopes, within deteriorated areas where soil erosion in informal settlements was exacerbated by an absence of sewage systems. The selection criteria for these sites were multifaceted, considering factors such as proximity to employment opportunities, area dimensions, degree of settlement maturity, topographical challenges, landslide risks, and the financial implications of providing essential services. The sites encompassed Achachicala, Sagrado Corazón, Mariscal Santa Cruz, San Antonio Este, Chamoco Chico, Tembladerani and El Tejar.[40] figs.70-1 The initiative to pave access routes and main streets was conceived to ameliorate accessibility to these communities, resulting in notable reductions in travel time and vehicle maintenance and operational expenses.[41]

35 Jorge Rivera Salazar, interview with the author, 2 November 2022.
36 World Bank, 'Bolivia - Urban Staff Appraisal', 12.
37 Ibid., 13.
38 Ibid., 21.
39 World Bank, 'Bolivia - Urban Staff Appraisal', 27.
40 Ibid., annex 1, 8.
41 World Bank, 'Bolivia - Urban Staff Appraisal', annex 7, 5.

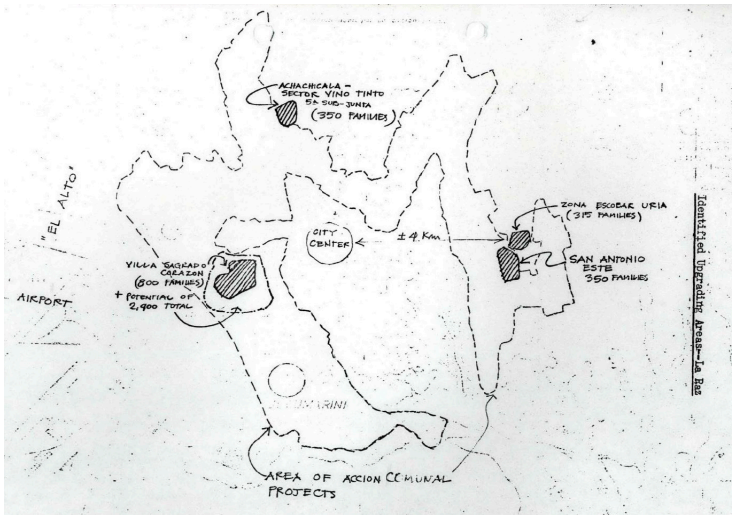


Fig. 72 First identifications of sites to develop Slum Upgrading programmes, in relation to the areas of work of Acción Comunal in La Paz. Part of Gattoni's trip to Bolivia in 1976. Source: Gattoni, 'Office Memorandum to D. A. Strombon', 31 August 1976, annex 3.

Figs. 73-4 Images prior to the Slum Upgrading programme, taken by a foreign team. (left) An open ditch lined with rocks to prevent erosion damage. (right) Informal settlements surrounding La Paz centre, 1976. Photos: V. Chada, R. Goethert, and G. Gattoni, Urbanization Primer, 199, 287.

Bolivian architects Jorge Rivera Salazar and Jaime Medrano A. were within the local team supervising the World Bank's urban improvement project in La Paz. Initially, Rivera Salazar and Medrano were the director and project manager for the HAM-BIRF team, respectively.[42] Rivera Salazar, director of Acción Comunal, was integrally involved since the project's inception, which was initially tailored to support four zones of informal settlements proximate to La Paz's central district.[43] fig.72 Acción Comunal's proven track record was highly regarded by World Bank delegates during their site evaluations as part of the urban upgrading initiative.[44] This respect was built upon Rivera Salazar's continuation of methodologies introduced by architect Sanjinés Rojas within La Paz's municipal office in the 1960s, as briefly touched upon earlier in this dissertation. Representing the World Bank, the mission was led by Mario F. Rothschild and George Gattoni. Rivera familiarised them with La Paz's intricate landscape, underscoring the necessity to personally climb the hills 'to see for themselves what we told them in little stories on paper; the success of the projects is the absolute knowledge of the places'.[45] The book ***Urbanization Primer*** includes photographs taken by Gattoni and team in La Paz, which could have been captured during these preliminary reconnaissance trips, preceding the formal agreement between the Bolivian government and the World Bank.[figs.73-4]

42 HAM stands for the Honorable Alcaldía Municipal de La Paz [Honourable Mayor's Office of La Paz] and BIRF the Spanish acronym for the International Bank for Reconstruction and Development, a member of the World Bank group.

43 George Gattoni, 'Office Memorandum to D. A. Strombon', Office Memorandum, 31 August 1976, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 1, Folder ID 1170972, WB.

44 Gattoni, 'Office Memorandum to D. A. Strombon', 31 August 1976.

45 Rivera Salazar, interview with the author.

The Acción Comunal programme, under the aegis of the La Paz municipality and then spearheaded by Rivera Salazar —an architect trained at the Universidad Mayor de San Andrés— was inaugurated in 1964. Architects like Guillermo Sanjinés Rojas, a former student at CINVA in the late 1950s, were instrumental in its inception. Primary amongst the objectives of Acción Comunal was to 'contribute to the acceleration of the national economy with the creation of a social infrastructure that allows the integration of the population of marginal areas coming from internal migrations from the countryside and the cities of the interior'.[46] This vision resonated with the urban operations programme championed by the World Bank during the 1970s. Furthermore, Acción Comunal aimed to 'to promote and organise popular participation through self-help programmes, with due technical and social assistance, in the construction of infrastructure works to improve the living conditions of the inhabitants of the peripheral areas.'[47] It also emphasised the 'training of leaders to achieve a massive, voluntary and conscious participation of the population in collective improvement works'.[48] The latter objectives bear a resemblance to community work methodologies piloted at CINVA during the late 1950s, a period during which Sanjinés Rojas was affiliated with the institution. Notably, the multidisciplinary composition of the Acción Comunal team in La Paz was indicative of a comprehensive approach. It encompassed professionals from diverse fields, such as architecture, engineering, law, and social work.[49] Such interdisciplinary perspectives, rooted in an understanding of local culture, subsequently offered a balance to the World Bank team's more technocratic orientations.

La Paz's Acción Comunal portfolio covered a range of projects in its trajectory: cleaning and levelling streets, building

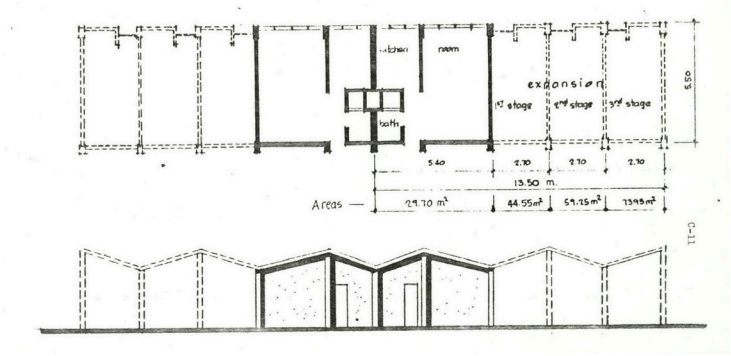
46 Sanjinés Rojas, 'El programa de Acción Comunal', 326-7. Translated by author.
47 Ibid. Translated by author.
48 Ibid. Translated by author.
49 Rivera Salazar, interview with the author; Sanjinés Rojas, 'El programa de Acción Comunal', 330.

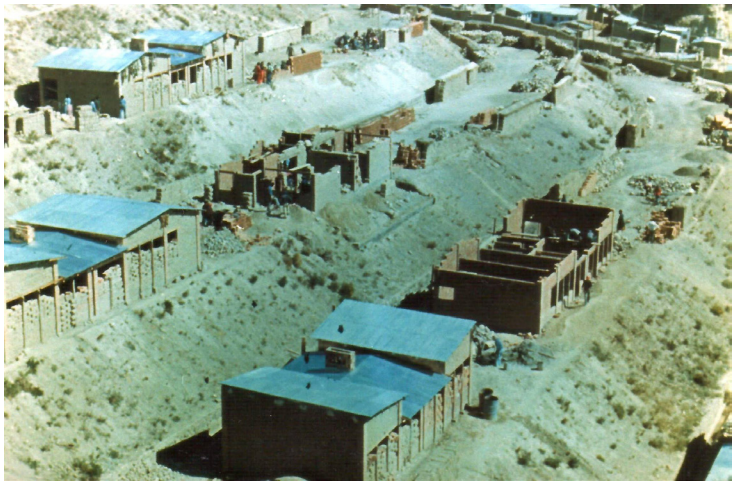
drinking water tanks, planting trees, renovating and constructing parks, cleaning streams and building social centres, educational institutions, sewage systems and sports facilities, to name a few. Several of these initiatives, during the second half of the 1960s, were supported by USAID under the Alliance for Progress.[50]

Turning to housing, Acción Comunal devised plans centred around neighbourhood units, each comprising 1,000 plots. The envisioned houses initiated with a singular room complemented by a kitchen and bathroom. These units, either built by self-help or with institutional assistance, were designed to be expansible. Further development rested solely on each family, tailoring their specific needs, all under the close technical supervision of Acción Comunal. Sanjinés Rojas acknowledged the Bolivian expertise in constructing with materials such as adobe walls, calamine sheeting for roofing, and composite wood and cement flooring. However, he also highlighted the deficiencies in these homes, particularly poor lighting and ventilation, alongside an inefficient design layout.[51]

Regarding funding, projects endorsed by Acción Comunal typically relied on a tripartite financial model: 50% from the government, 30% from another institutional source or directly from the community, and the remaining 20% from the end-users. This last portion often took the form of contributions in construction materials, encompassing sand, stone, gravel, cement, and other locally sourced materials.[52] However, the funding structure proposed by the World Bank in 1978 aimed to forgo the 'heavy subsidy (50% of costs)' traditionally borne by the La Paz municipality. This revision was envisioned to enhance the scalability of similar projects across a broader spectrum.[53]

50 Sanjinés Rojas, 'El programa de Acción Comunal', 323.
51 Ibid., 325-6.
52 Rivera Salazar, interview with the author; Sanjinés Rojas, 'El programa de Acción Comunal', 329.
53 World Bank, 'Bolivia - Urban Staff Appraisal', 33.





Figs. 75-6 (top) 'The floor plan and elevation for the unit being constructed by the City of La Paz in the Lazareto development', December, 1976. Source: National Savings and Loan League, 'Bolivia Shelter', 143. (opposite page) Acción Comunal project in Lazareto. Source: Jorge Rivera Salazar personal files.

A pressing concern addressed by Acción Comunal de La Paz was the landslides on hilly terrains, primarily induced by rainfalls. For instance, a significant landslide in the early 1970s jeopardised over 100 residences, prompting a remedial initiative in Lazareto, with designs by the architect Jaime Medrano. Rivera Salazar recounts the establishment of a temporary camp for the displaced residents. Recognising the community's intrinsic capability for self-help, a scheme involving ten platforms was conceptualised to reinforce the terrain and provide a foundation for housing and pedestrian pathways. The building materials for the houses were stockpiled on the platforms so that the houses could be erected quickly when construction began. The undertaking, spanning 1972 to 1978, leveraged state-provided machinery and community labour —likely serving as a prototype for subsequent World Bank-backed projects in La Paz post-1978. Acción Comunal's close work with the community was essential to the completion of the works.[54] The financial

54 Rivera Salazar, interview with the author.

blueprint involved a 20% municipal contribution, 30% self-help, and a 50% loan repayment over seven years.[55] Families were able to continue living where they had previously lived.[figs.75-6] By this juncture, 76 landslide-vulnerable city regions were identified.[56] Concurrently, as the Lazareto project reached its final phase, another landslide event struck El Tejar.

The El Tejar incident presented distinct challenges compared to Lazareto. Affected families from El Tejar were relocated to the Villa Esperanza neighbourhood in El Alto, a site appropriated by the local authority. This episode affected approximately 300 households, necessitating nuanced negotiations between landlords and tenants to ensure holistic resolutions. Infrastructure essentials, namely electricity, potable water, and sewage were prioritised before any housing construction commenced. Whilst families were permitted to gather materials in advance, actual construction

55 National Savings and Loan League, 'Bolivia Shelter Sector Assessment' (Washington, DC: USAID, December 1976), 55-6,63-4, Agency for International Development - Office of Housing - Bolivia Shelter Sector Assessment - December 1976 - 169.399 A, Folder ID 1093581, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.
56 National Savings and Loan League, 'Bolivia Shelter', 64.

awaited the establishment of this essential infrastructure —a departure from several other similar international initiatives. The project engaged the expertise of Bolivian architect Juan Carlos Torres.[57] Rivera Salazar underscores the integral approach employed for both Lazareto and Villa Esperanza. Emphasising collaborative planning, families were actively integrated into various project stages. Efforts were also made to identify and utilise inherent skills within the community, such as carpentry, electrical, and plumbing proficiencies, while masonry tasks were distributed among those without specific construction know-how.

Thus, by 1976, as negotiations with the World Bank commenced, Bolivia had already garnered significant experience in urban and slum upgrading projects, particularly through the La Paz mayor's office. This expertise was particularly prominent in organising community-driven work. One of the pioneering projects undertaken by Acción Comunal in conjunction with the World Bank, as part of the Urban Development Project launched in 1978, was centred around the 8 de diciembre residential area. World Bank's conclusive reports suggest that the initial project in this area provided a blueprint for replicable housing and urban development strategies. The strategies comprised comprehensive orientation sessions for residents, detailing available options and associated costs while also highlighting opportunities for cost reduction via self-help initiatives.[58]

The 8 de diciembre area was an informal settlement located proximate to a river, characterised by its absence of urban planning and densely packed housing. Implementing the project mandated the demolishing of certain residences to facilitate road expansions, transforming narrow one or two-metre alleys into broader 10-metre thoroughfares.[59] The endeavour aimed to benefit approximately 260 families, with noticeable community commitment.[60] Consequently, this undertaking not only facilitated urban improvement but also introduced new incremental housing.

Supplementing these slum upgrading efforts, urban improvement projects were integrated. Some initiatives incorporated incremental housing via self-help, while others primarily focused on delivering essential services such as potable water. The 8 de diciembre initiative was complemented by more expansive investment projects, including 16 de julio and Villa Adela in El Alto, which aimed to benefit around 4,800 and 7,000 families, respectively.[61] Furthermore, from 1981 to 1986, additional projects were successfully executed in areas like Tembladerani, San Antonio, Bajo Tejar, and La Portada, to name a few.[62] Villa Adela, initially earmarked for a Sites and Services project, underwent several modifications. Consequently, the allocated funds were redirected towards urban enhancement projects spearheaded by CONAVI, exemplified by basic infrastructure development in El Alto.

In addition to their urban upgrading initiatives, the HAMBIRF collaboration expanded its scope to include the enhancement of food retail markets. This alignment was consistent with Robert McNamara's objectives, which emphasised direct support for the employment of those in the lower income bracket. Notable projects included works on Antofagasta, Stronger, Bolivar, and Río Seco markets located within La Paz and El Alto.[63] The involvement of Rivera Salazar's team, originating from the mayor's office of La Paz, was instrumental in kick-starting these ventures. Each market vendor was entitled to solicit architectural design services from the

57 Rivera Salazar, interview with the author.
58 World Bank, 'Bolivia - Project Completion', 11.
59 Rivera Salazar, interview with the author.
60 D Beckman, George Gattoni, and J. Saravia, 'Back-to-Office Report. Loan 1489-BO - Urban Development Project', Back-to-office report. Supervision mission (Washington: World Bank, 29 April 1980), 3, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 6, Folder ID 30112098, WB; Aura Garcia de Truslow and Thakoor Persaud, 'Back-to-Office Report. Loan 1489-BO - Urban Development Project', Back-to-office report. Supervision mission (Washington: World Bank, 7 November 1983), annex 3, 2, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 15, Folder ID 30148708, WB.
61 Aura Garcia de Truslow and Thakoor Persaud, 'Back-to-Office Report. Loan 1489-BO - Urban Development Project', Back-to-office report. Supervision mission (Washington: World Bank, 22 October 1982), annex 3, 4, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 13, Folder ID 30148706, WB.
62 World Bank, 'Bolivia - Project Completion', 35.
63 World Bank, 'Bolivia - Project Completion', 35; Rivera Salazar, interview with the author.

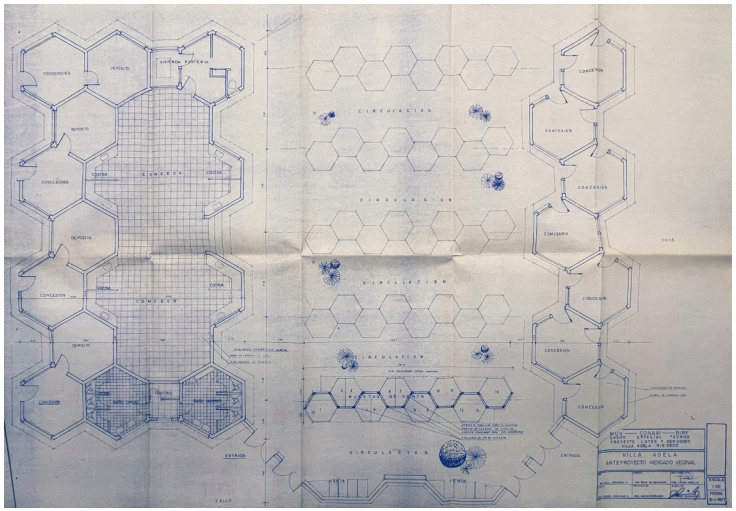


Fig. 77 Preliminary project for the market in Villa Adela, 1977. Source: Proyecto Lotes y Servicios, Villa Adela - Anteproyecto Mercado Vecinal, Plan view, 1:50 (CONAVI-BIRF, 31 January 1977), Equipo Especial Tecnico - Proyecto Lotes y Servicios - Villa Adela Mercado Vecinal - 175.820 Volume 3 B2, Folder ID 1095271, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.

municipal unit.[64] Concurrently, the CONAVI-BIRF staff oversaw the development of additional market projects, such as in Villa Adela, with designs by Jaime Murillo Palacios.[fig.77]

The World Bank's completion report attests to the success of these urban and slum upgrading programmes, even amidst the prevailing political and economic challenges. In sync with the prevailing development paradigms, the initiative reached the lowest-income people while focusing on alternative markets to bolster employment. The outcomes exceeded initial projections: 1,541 retail stalls were erected instead of the initially anticipated 1,100. Such was the success of these programmes that HAM personnel were invited to countries like Guatemala and Ecuador to offer their technical expertise in the establishment of analogous projects.[65]

64 Rivera Salazar, interview with the author.
65 World Bank, 'Bolivia - Project Completion', 10-1.

Operation Sites and Services in Río Seco, El Alto

The architecture of Río Seco's Sites and Services brings together a long inter-American trajectory of aided self-help housing and homeownership concepts. These ideas can be traced back to initiatives tested in Puerto Rico in the late 1930s. The project synthesises a multifaceted exchange and circulation of expertise, encompassing interactions with housing institutions in La Paz, technical stays at foundations in San Salvador, consultations with the World Bank in Washington, and academic partnerships with scholars from the Massachusetts Institute of Technology in Cambridge, Boston area, to name a few of the main stakeholders coming from South, Central and North America.[fig.78]

The urban design and housing blueprint for Río Seco underwent three preliminary drafts carried out by CONAVI and the Bolivian Ministry of Housing. The selected iteration was crafted under the guidance of Jaime Murillo Palacios, a young Bolivian architect who had joined CONAVI in the early 1970s at the suggestion of his professor, Walter Murillo Salcedo, during Murillo Palacios's inaugural year at the Universidad Mayor de San Andrés.[66] Walter Murillo Salcedo, who headed CONAVI during the inception of the World Bank initiative, was intimately familiar with the principles of low-cost construction and aided self-help housing. This kind of knowledge was taught at CINVA in Colombia in the late 1950s, coinciding with his studies there. Murillo Salcedo later elaborated and promoted these architectural principles in documents from 1973 and 1975 focusing on the Bolivian context.[67] Notably, these writings are cited in World Bank reports and USAID reports.

Jaime Murillo Palacios indicates that his knowledge for designing a Sites and Services type project came from learning about

66 Jaime Murillo Palacios, interview with the author, 26 April 2022.
67 Walter Murillo Salcedo, 'Curso de experiencias y actualización sobre el problema de vivienda de interés social - Bases para un plan nacional de vivienda' (CONAVI, 19 June 1973), 169.401 A, Folder ID 1095611, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.

Fig. 78 Inter-American trajectory of people and architectural ideas behind the Río Seco Sites and Services project. Source: by author.

the experiences shown at UN Habitat I, held in Canada in 1976.[68] This forum, which spotlighted informal settlements and vernacular architecture, among other topics, featured presentations by figures such as Charles Correa, Barbara Ward, and John Turner, who are renowned for their contributions to affordable housing and developmental issues. Murillo Palacios and his team's combination of international experience and knowledge of Bolivia's environmental and socio-cultural dynamics resulted in a design that would have brought together local constraints and World Bank requirements. Subsequent to the endorsement of his preliminary design, Jaime Murillo, heading the Sites and Services project unit, participated in a technical assistance and study tour initiative funded by the Urban Development operation. This involved travel to El Salvador,

68 Murillo Palacios, interview with the author.

Guatemala, and Cambridge, near Boston, including taking short courses at MIT.[69] Bolivian architects Rivera Salazar and Medrano A. also embarked on this journey, albeit their itinerary was limited to El Salvador and Washington.[70]

Concerns and reservations emerged within the CONAVI team regarding potential problems in the project's design, as specified in the assignment description. Concurrently, World Bank documents suggested that the project did not present exceptional risks beyond those typically inherent in such undertakings. These risks primarily concerned the ability of the implementing agencies to execute the project both promptly and efficiently. Implementation delays could significantly affect the project's costs.[71] Therefore, the mentioned study tour and training courses were likely conceived to facilitate modifications to the project before reaching its final development phase. Additionally, the World Bank intended to provide technical assistance to Bolivian organisations, such as BANVI, one of the responsible for the project's implementation.

From the onset, Jaime Murillo Palacios and his team's key counterproposals included challenging the World Bank's expectation of merely offering a plot connected to basic utilities.[72] Murillo Palacios argued that providing at least one room with a bathroom was essential, even if it increased the project's financial requirements. This addition was included since the beginning, primarily due to the harsh climatic conditions in El Alto. It was believed that residents would gradually extend their homes, but establishing an initial minimum standard was considered crucial for accommodating families.[73] In Murillo's perspective, this approach better aligned the project with El Alto's unique climatic and cultural context.

69 Murillo Palacios, interview with the author; Juan Carlos Nutkoviez, 'Letter to D. A. Strombom', 5 November 1978, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 4, Folder ID 30112096, WB.
70 Rivera Salazar, interview with the author.
71 World Bank, 'Bolivia - Urban Development Project (English)', Staff Appraisal Report (Washington: World Bank, 9 September 1977), 34.
72 Murillo Palacios, interview with the author.
73 Ibid.

The CONAVI contingent undertook a trip to Central America, specifically El Salvador and Guatemala. There, they held conferences and explored projects implemented by FUNDASAL in El Salvador. George Gattoni was familiar with FUNDASAL from his earlier professional endeavours. During the 1970s, the World Bank funded several Sites and Services projects in the region.[74] figs.3,30,32,79 FUNDASAL, an acronym for Fundación Salvadoreña de Desarrollo y Vivienda Mínima [Salvadoran Foundation for Development and Minimum Housing], is a private entity established in 1968. It reportedly embarked on its journey with a modest initiative to relocate 69 families affected by flooding, subsequently broadening its scope of operations.[75] The World Bank's first venture into supporting a Sites and Services project began there in 1974, tasking FUNDASAL with its execution. This was succeeded by another initiative in 1976. The inaugural project envisaged the construction of sanitary cores for 7,000 units, half of which would entail self-help basic homes. In contrast, the subsequent endeavour revolved around the creation of 8,000 owner-established dwellings on urban plots and the enhancement of rudimentary infrastructure and community amenities for nearly 800 families via mutual-help, all complemented by secure land tenure and housing improvement credit lines.[76] An observation in the World Bank's report on FUNDASAL highlights the institution's exemplary demonstration of how adeptly managed private entities can play a pivotal role in shelter provision.[77]

A Peruvian delegation also made contributions to this World Bank-backed urban operation. This delegation collaborated with Bolivia's newly instituted BANVI, sharing expertise from the Banco de la Vivienda del Perú [Peruvian Housing Bank BVP] in areas like financial management, resource mobilisation, and its function as a fiscal intermediary in the Urban Development project's execution.[78]

74 World Bank, 'El Salvador - Sites and Services Project (English)', Staff Appraisal Report (Washington DC: World Bank, 20 September 1974); World Bank, 'El Salvador - Second Urban Development Project (English)', Staff Appraisal Report (Washington: World Bank, 30 April 1977).
75 Ibid., 1.
76 Ibid., 2-3.
77 Ibid., 11.
78 Fernando Aguila and Arturo Montero, 'Letter to D. A. Strombom', 19 January 1979, Urban Development

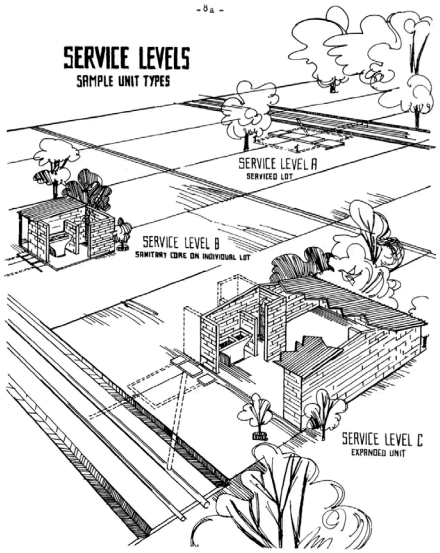


Fig. 79 El Salvador World Bank housing operation. Source: World Bank, 'El Salvador - Second Staff Appraisal', 8a.

Reflecting on the Central American visit, Murillo Palacios underscored a significant learning experience: understanding the depth of community involvement in project realisation, especially in employment generation. A segment of the self-help initiative involved the production and subsequent local market sale of construction materials sourced from the US —although Bolivia did not adopt these particular production methodologies. During this study tour, Murillo Palacios and his colleagues also participated in courses at the Massachusetts Institute of Technology, focusing on housing projects tailored for developing nations. This academic immersion, combined with his hands-on experience helming the local Sites and Services team, provided Murillo with the necessary insight to later integrate certain auditing techniques and other topics he had acquired during the course into Bolivian government institutions.[79]

Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 4, Folder ID 30112096, WB; Mario Rothschild, 'Office Memorandum to D. A. Strombom', 13 November 1978, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 4, Folder ID 30112096, WB.
79 Murillo Palacios, interview with the author.

While in the Boston area, Murillo Palacios met at the MIT with Argentine architect Horacio Caminos and his USDP team. This team subsequently took up and advanced the project Murillo Palacios and his colleagues initiated for their bidding. Thus, local and international institutional views converged again, further enriched by Caminos' expertise from various analogous projects in developing nations. Yet, similar to Murillo Palacios' critique of the World Bank's approach to the Sites and Services endeavour in El Alto, the USDP group's design adaptation drew criticism from Bolivian architects. Jorge Rivera Salazar recounted his interactions with Caminos, highlighting concerns about the Río Seco project designs due to their perceived schematic character.[80]

Rivera Salazar was not the sole voice expressing reservations about the urban design in La Paz. A 1980 report shed light on the concerns put forth by Bernardo Corro to George Gattoni and the World Bank team. Corro emphasised the project's oversight in terms of Bolivian urban patterns, cultural inclinations, and the inhabitants' lifestyle nuances. He lamented the housing designs that overlooked a somewhat enclosed courtyard instead of a street, suggesting this could hinder the residents' socio-economic interactivity. Despite the intention to amalgamate groups of roughly 20 families, this design was perceived as curtailing broader engagement, potentially impeding residents from securing auxiliary income, given that no direct access was provided to high-traffic streets —a setup that might have supported small businesses or workshops. Moreover, Corro underscored how the 'mechanistic uniformity' of streets and façades seemed discordant with Bolivia's aesthetic values. Additionally, the diminutive size of the houses, ostensibly designed for nuclear families, did not accommodate the extended family and friends who often cohabited.[81]

The first Río Seco project's draft comprised 1,982 plots, each spanning 90 square metres with dimensions of 6 metres in width and 15 metres in depth[fig.80] —the final urban design blue-

80 Rivera Salazar, interview with the author.

81 Bernardo Corro, 'Informe a Ranulfo Balderrama', Work report (La Paz: CONAVI-BIRF, 26 March 1980), Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 6, Folder ID 30112098, WB.

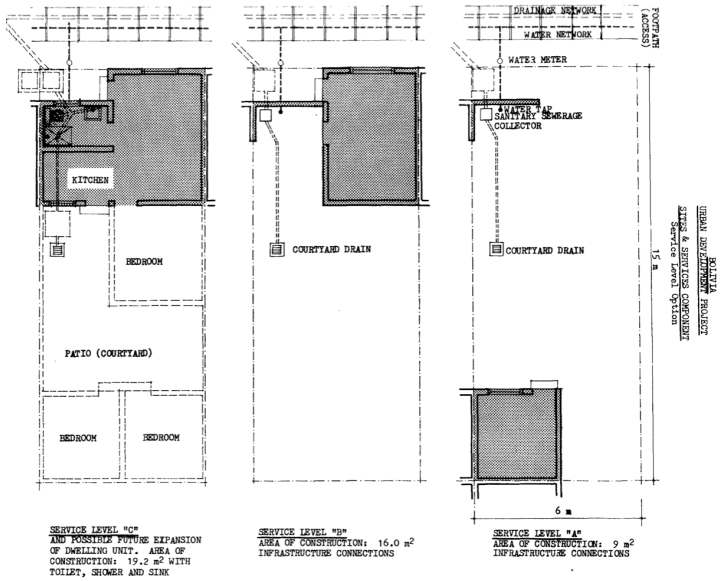


Fig. 80 Expansion layouts of housing in the Río Seco Sites and Services project found in early World Bank reports. The backyard is surrounded by rooms, a pattern not commonly seen in other Bank projects. Source: World Bank, 'Bolivia - Urban Staff Appraisal', 57.

print mirrored the layout patterns published by Caminos and Goethert in *Urbanization Primer*.[figs.11,84] A modest 19.2 square metre structure, including a room and bathroom, was designated at plot's front in the best case scenario —a slight reduction from Abrams' 1959 proposal of 21 square metres. Gattoni's architectural blueprint, as evidenced in 1980, proposed subtle adjustments, such as repositioning the entrance to align with the roofing structure, ensuring cost-effectiveness while simultaneously ensuring smooth access to the backyard. This also facilitated potential room subdivisions in the future.[82] [fig.81] Constructed primarily using adobe, these units were integrated with the city's utilities. However, early settlers recount having to fetch potable water from neighbouring areas upon their initial relocation to Río Seco.[83]

82 George Gattoni, 'Letter to Ranulfo Balderrama', Letter, 14 November 1980, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 8, Folder ID 30112100, WB.

83 Interviews with current residents of the Río Seco neighbourhood, March and April 2022.

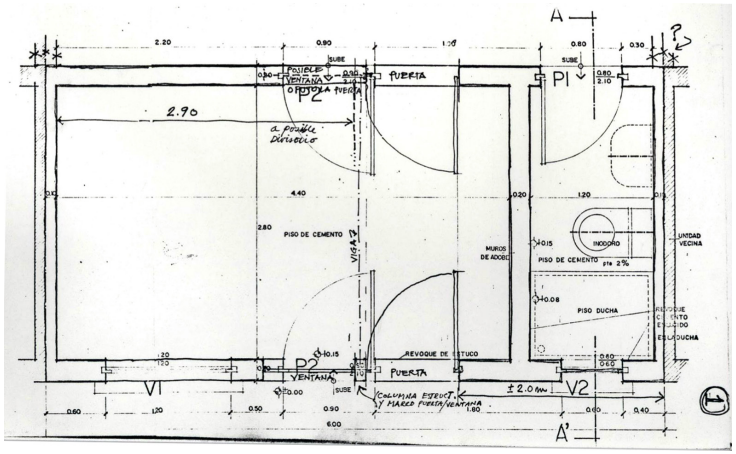


Fig. 81 CONAVI's Plan of the housing unit for the Río Seco Sites and Services project with suggestions made by George Gattonni, World Bank architect, 1980. Source: George Gattoni, 'Letter to Ranulfo Balderrama', 14 November 1980, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 8, Folder ID 30112100, WB.

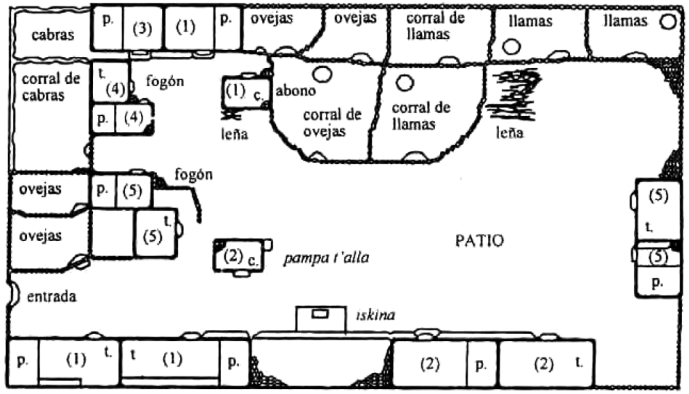


Fig. 82 Layout of a courtyard shared by Aymaras in Qaqachaka, Bolivia. The courtyard is surrounded by sheep, llama and goat corrals, as well as sleeping quarters (p), storerooms (t) and a kitchen (c). Source: Arnold, 1992, p.43.

The World Bank's arrangement of rooms around a central courtyard in its housing plans for El Alto is a configuration rarely seen in its projects in other nations. These preliminary designs, which guide future extensions, are found in the international institution's initial reports and correspondence from 1976. The layout of the El Alto plots mirrors that of Sites and Services projects in several countries, characterised by their narrow, elongated design. There, the prevailing norm in courtyard design seems to emphasise their potential for housing extensions, ensuring sunlight penetration and ventilation to rooms seen, for example, in the models designed for Ecuador or Colombia.[figs.20-1] However, the courtyard designs for the El Alto houses contrast with these, showing enclosed courtyards surrounded by rooms.

This distinct aspect of the El Alto housing project could potentially be linked to the cultural nuances of the Aymara population, who migrated there from rural areas.[84] Architects and anthropologists, having explored urban neighbourhoods in Bolivia and northern Chile, suggest that this indigenous community often transferred elements of their rural and productive way of life to these urban spaces during migration.[85] As a result, it is likely that courtyards were initially intended for activities like cultivating small vegetable gardens or raising animals, serving both for self-consumption and as a source of income. Anthropologist Denise Y. Arnold provides an illustrative sketch depicting an arrangement where rooms for people and livestock encircle a shared 'patio' in the Qaqachaka town of Bolivia.[86] [fig.82] These open spaces, in their urban condition, are often utilized for productive tasks such as handicrafts or weaving, practices rooted in Andean culture.

However, accounts from families that resettled in Río Seco during the early 1980s suggest that consistent engagement in traditional practices such as animal husbandry or agriculture

84 María José Cisternas, 'Migración Del Habitar: Del Altiplano a La Ciudad', Course paper (Ciudades de la Guerra Fría, Pontificia Universidad Católica de Chile, 2020).

85 Diego González and Ana María Carrasco, 'Memoria e identidad. La tradición textil aimara en el norte de Chile y el espacio construido', *Diálogo andino*, no. 63 (2020): 91–100; Mariela Díaz, 'La apropiación urbana de los migrantes aymaras en la ciudad de El Alto (Bolivia): Un estudio sobre las dinámicas urbanas y laborales', *Revista de Direito da Cidade* 8 (30 November 2016): 1584–1621.

86 Denise Y. Arnold, ed., *Hacia un orden andino de las cosas: tres pistas de los Andes meridionales* (La Paz: Talleres Gráficos Hisbol, 1992), 40-3.

was sporadic, mainly due to the small size of the courtyards of the Sites and Services.[87] Some families kept animals such as rabbits and chickens and recall that others kept pigs, which subsequently caused problems, especially bad smells. Some even recall rules prohibiting the rearing of certain animals in the vicinity. This adaptation of courtyards, preserving certain cultural facets, underscores a localised reinterpretation of the generic blueprint that the World Bank propagated across Latin America, Africa, and Asia. Reinhard Goethert, a member of the USDP contingent involved with Bolivia's project, then elaborated on the significance of courtyards in such urban developments within emerging economies.[88] He perceived them as an opportunity to integrate Western housing approaches with indigenous cultural peculiarities —although his writings do not explicitly reference Bolivia.

According to architect Rivera Salazar, courtyards played a crucial role in the residences of Bolivia's low-income groups, often serving as productive spaces like workshops.[89] Architect Jaime Murillo notes that his team aimed to conceive a versatile space that could be expanded based on individual family needs, regardless of their rural or urban origin. For instance, they did not draft designs exclusively for ethnic groups such as the Aymara or Quechua.[90] In their approach, three possible expansion schemes were outlined. Nevertheless, the evolution of the homes was ultimately left to the discretion and capability of the owners. Some employed collaborative efforts typical of the Aymara culture, while others sought financial means to hire assistance, as seen in the case of a young single mother.[91] Over time, these courtyards have seen increased construction, though some have retained small garden spaces.[fig.83] In other

87 Interviews with current residents of Río Seco.
88 Reinhard Goethert, 'More than a Pattern: The Contributions of the Courtyard House in the Developing World', in *The Courtyard House: From Cultural Reference to Universal Relevance*, ed. Nasser Rabbat (London: Ashgate, 2010), 173–90.
89 Rivera Salazar, interview with the author.
90 Murillo Palacios, interview with the author.
91 Interviews with current residents of Río Seco.

Fig. 83. Small garden in the backyard of one of the homes in the Río Seco Sites and Services neighbourhood, February 2022. Photo: Ruddy Quispe.

areas of El Alto, with larger plots, there have been instances of vegetable cultivation and sheep and llama rearing in the past decade.[92]

Furthermore, in the original planning, the beneficiaries of the Río Seco project would not come directly from rural areas, as they would be required to have been residents of La Paz for a period of two years prior.[93] This primarily urban demographic could add to the explanations for why the courtyards of this particular Sites and Services initiative were not predominantly used for rural activities. However, while many residents of this neighbourhood came from the La Paz valley or other urban segments of El Alto, a portion of the population did have roots in the interior of Bolivia.[94]

92 Díaz, 'La apropiación urbana'.
93 World Bank, 'Bolivia - Urban Staff Appraisal', 29.
94 Interviews with current residents of Río Seco.

The urban layout of Río Seco adheres to a consistent grid pattern, a common feature in such developments.[fig.84] As elucidated by Caminos and Goethert in *Urbanization Primer*, the objective was to privatise the maximum land extent, perceiving public spaces as wasteful and potential zones of neglect, thus becoming a 'no man's land'.[95] Consequently, expansive pavements, broad streets, and other such public areas were minimised, paving the way for more intimate squares within these neighbourhoods. Integrating urban amenities was paramount, especially as these projects were frequently located on the city's fringes. Essential community facilities, including a health centre, school, church, police station, and notably, a market, were earmarked for Río Seco.[fig.85] Even some squares, which are scarce in El Alto —there was a precedent for this in Ciudad Satélite, albeit on a grander scale. Yet, the World Bank's final report in 1992 highlighted delays in infrastructure deployment, attributing them to Bolivia's fiscal and bureaucratic challenges.[96] Present-day observations reveal the emergence of various community amenities, with certain modifications, including a football pitch not present in the initial blueprint.

The trajectory of back-and-forth exchanges between architects and urban designers based in La Paz, Boston, and Washington has a final iteration in Bolivia. During the early 1980s, Bolivian architect Ranulfo Balderrama Mendoza, heading the Sites and Services Project Unit, assumed a role in executing the Río Seco project. An alumnus of Universidad Mayor de San Andrés, Balderrama furthered his architectural mastery at PIAPUR between 1965 and 1966.[97] Notably, in 1970, he envisioned a comprehensive urban structure blueprint for El Alto, detailing road infrastructure, population densities, urban centre layouts, community facility dis-

95 Caminos and Goethert, *Urbanization Primer*, 92.
96 World Bank, 'Bolivia - Project Completion'.
97 PIAPUR: Inter-American Program for Urban and Regional Planning, in Lima, Peru. Joint programme between the National School of Engineers of Peru, the Planning Institute of Lima, and with the advice of Yale University, USA.

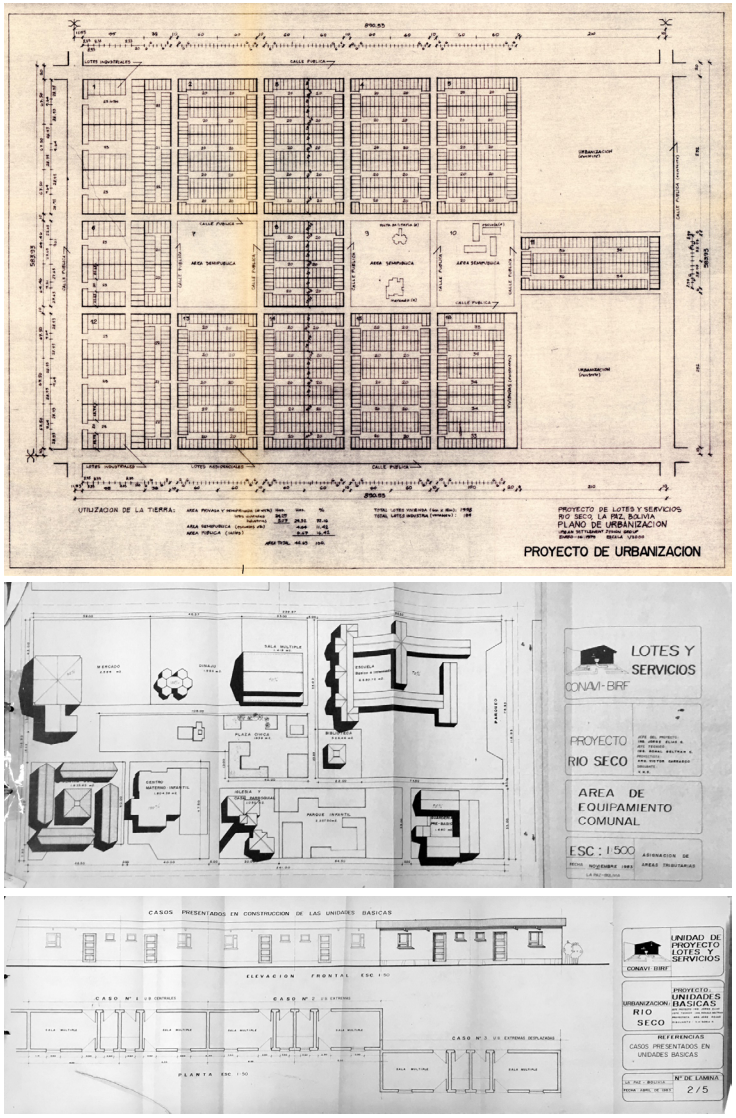


Fig. 84 (top) Río Seco Sites and Service project by USDP in 1977. Source: Urban Settlement Design Group, Proyecto de Urbanización, 16 January 1977, 1:2000, 16 January 1977, Proyecto de Lotes y Servicios Rio Seco, la Paz, Bolivia - Urban Settlement Design Group - 19 Enero 1979 - 175.820 Volume 3 A7, Folder ID 1095231, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.

Figs. 85-6 Area of community facilities (middle) and facades and floor plans (bottom) drawn by CONAVI for the Río Seco project in 1983. Source: Archive of the Ministry of Public Works, Services and Housing, Bolivia.

Figs. 87-8. (top) Road Structure of the Urban Structure Project for El Alto. (bottom) Theoretical organisational and functional scheme for the Urban Structure project for El Alto. Responsible architect, Ranulfo Balderrama. The map shows centres ranging from the regional scale, descending to the city, community, and district scale. Source: Ranulfo Balderrama, Proyecto de Estructura Urbana de El Alto de La Paz - Estructura Vial, n.d., 1:40000, n.d., Plan Directer de el Alto de la Paz - hotel Libertader - Maps and Drawings 175.820 Volume 3 A2j, Folder ID 1095081, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.

tribution, varied land uses —including institutional, commercial, residential, and industrial sectors— and also introduced relocation strategies, such as the international airport.[98] figs.87-8 Cuadros indicates that this urban proposal, commissioned by the La Paz mayor's office, witnessed only partial execution, specifically in its road components in El Alto Sur.[99]

Under Balderrama's local leadership, the Sites and Services design and implementation phase continued to receive external suggestions. Comments came not only from the World Bank, through Gattoni, but also included visits from FUNDASAL experts, regarding design issues and to offer administrative counsel, ensuring the project's realisation.[100] Balderrama did express reservations regarding the relatively diminutive plot sizes when juxtaposed with other CONAVI-led social housing initiatives. He recognised, however, the necessity of such a design approach to cater to Bolivia's most economically challenged demographics.[101]

From an urban design perspective, Balderrama acknowledged that the Río Seco project featured narrower streets compared to other El Alto urban areas. However, he believed that projects such as this one, would contribute to the spatial regularisation of areas in El Alto, even if the urban extensions followed some different spatial conventions.[102] During his tenure overseeing the Sites and Services project, one of Balderrama's achievements was ensuring urban water provision and infrastructure. In addition, he emphasised the intention to create a district that integrated an artisanal and an industrial sector, interlinking living spaces with employment opportunities —a feature included in USDP's urban

98 Ranulfo Balderrama's personal files; Ranulfo Balderrama, 'Plan Director de "El Alto" de la Paz', n.d., Plan Directer de el Alto de la Paz - hotel Libertader - Maps and Drawings 175.820 Volume 3 A2j, Folder ID 1095081, ISAD(G) Reference Code WB IBRD/IDA LAC, WB.

99 Cuadros, *La Paz*, 169-72.

100 Ranulfo Balderrama, 'Informe a Oreste Rosazza', Acitivities report (La Paz: CONAVI-BIRF, Abril 1980), Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 6, Folder ID 30112099, WB.; Mario Rothschild, 'Office Memorandum to Mauricio Silva', Office Memorandum, 14 July 1980, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 7, Folder ID 30112099, WB.

101 Ranulfo Balderrama Mendoza, interview with the author, 31 October 2022.

102 Balderrama Mendoza, interview with the author.

Fig. 89. Río Seco circa 1987. Source: Servicio Nacional de Aerofotogrametría, Bolivia.

design. His work was continued by other local architects. The residential construction process was incremental. Initially, a rudimentary room equipped with a bathroom was erected, and subsequently, families would enlarge their homes.[figs.89-91]

*

In 1981, a third iteration of the Sites and Services project surfaced, steered by BANVI in Quiswara, positioned two kilometres south of Villa Adela. Despite its omission from the initial scheme, there was an inclination to reallocate resources to it. This endeavour preserved the commitment to assist the economically

Figs. 90-1. (top) Río Seco area in February 2022. El Alto is currently the second most populated city in Bolivia. (bottom) Demarcated in red line are some of the few remaining original houses in the now dense Sites and Services neighbourhood of Río Seco, 2022. The roofs shown are the rooms that were originally built in the 1980s. Source: Drone photos by Ruddy Quispe.

Fig. 92. Advertisement for the third Sites and Services Project. It promotes a 'New Housing Alternative – Home-ownership through Self-Help'. The announcement highlights this as a Bolivian Housing Bank initiative, financed in conjunction with the World Bank. It offers three options: a basic site connected to infrastructure networks; a site with a sanitary core; and a site featuring a small house. Plans (yet to be realized) include a market, school, health centre, public spaces, and sports facilities. Prospective buyers are offered repayment terms of 15 to 20 years at an annual interest rate of 10%. Source: Newspaper El Diario, 31 October 1982, Bolivia.

disadvantaged via self-help mechanisms. Strategically situated adjacent to an industrial zone bankrolled by the World Bank, the location's initially perceived remoteness was offset by potential on-site employment opportunities.[fig.92] Its design concept, grounded in the integration of essential community amenities like schools and health centres, further reinforced its feasibility.

At the same time, although a Sites and Services project was planned in Villa Adela to complement the El Alto initiative, this venture was not carried out. The funds earmarked for this purpose found their redirection towards urban and slum upgrading on La Paz's hillsides and the enhancement of urban infrastructures within existing Villa Adela urbanisation. This fiscal realignment culminated in improved services for some 5,000 residents, thus reinforcing the urban development axis advocated by CONAVI.

The Urban Development project's trajectory was not without challenges. The 1992 World Bank report attests to the project's failure to reach its ambitions fully. Impediments stemming from Bolivia's political turbulence, frequent organisational reshuffles —such as abrupt managerial departures— and economic adversities such as inflation and recurrent strikes hindered its progress. Furthermore, apprehensions within CONAVI regarding the extent of their involvement in low-income activities, led to funds re-allocation towards the municipality for slum upgrading and urban improvement.[103] While the municipality outperformed its set benchmarks, CONAVI only attained its adjusted objectives, albeit with prolonged timelines. The World Bank's concluding analysis underscores a dichotomy in the project's outcomes —it thrived constructively but struggled financially, as beneficiaries were unable to repay the loans they received.[104]

* * *

103 World Bank, 'Bolivia - Project Completion', ii.
104 Ibid., iii, 9.

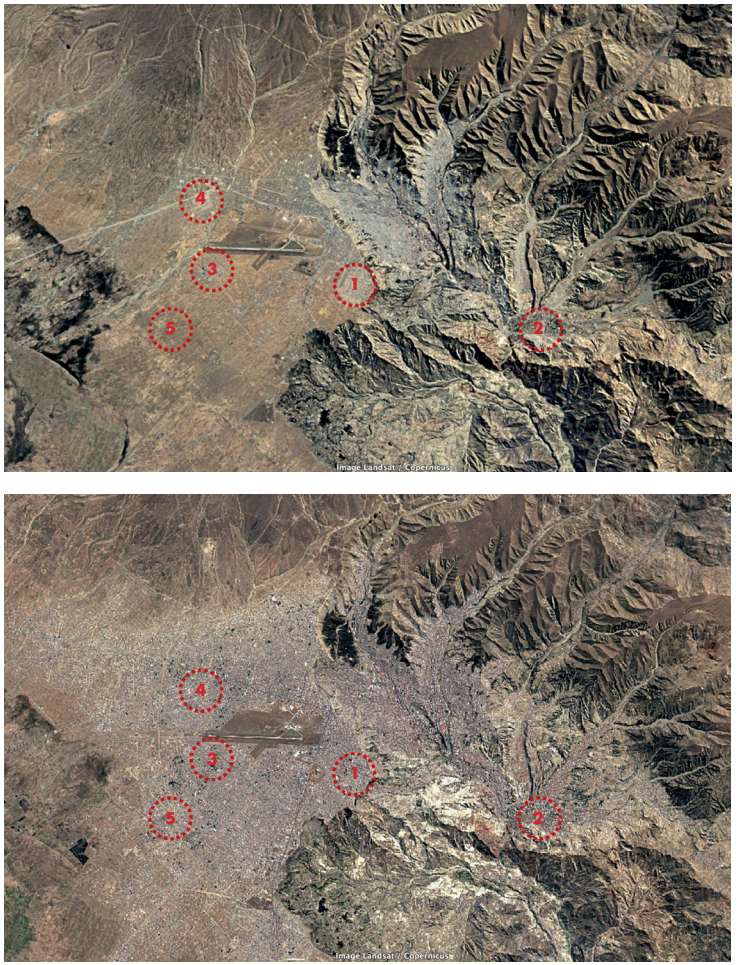
Established as a city in 1985, El Alto now stands as Bolivia's second-largest urban centre, with a population of one million. Notably, the city underwent significant demographic shifts in the 1980s. In 1983, it saw a surge in migration due to drought, followed by an influx of miners in 1987, who sought refuge after widespread job losses in the mining sector. Newcomers to El Alto typically acquired land plots from private developers, embarking on a phased construction of their homes as funds became available.[105] As these communities grew, residents grouped into Juntas and collectively lobbied the municipality for essential community services. In some ways, the urban development patterns of these emerging neighbourhoods seemed to mirror the model neighbourhoods advocated by the IDB and the World Bank.[106] This expansion has suffered from multiple invasions and illegal sales, as well as the improvement of neighbourhoods with public investment, such as cable cars to connect La Paz with El Alto, following the examples of cities such as Medellín and Caracas, in Colombia and Venezuela.

*

This research attempted to trace the ramifications of US narratives on Bolivian housing policy through three periods of development during the Cold War era. Initially, there were the missions of experts like Charles Abrams, framed within the broader panorama of US and UN international technical aid, which expanded concepts like aided self-help housing, homeownership, and identified El Alto as a focal point for urban sprawl. This was succeeded by the Alliance for Progress, led by agencies like USAID and IDB, which advocated new urban developmental clusters —San Miguel targeting the middle-income groups, and Ciudad Satélite in El Alto catering to the lowest-income people. Lastly, the

105 Godofredo Sandoval and Fernanda Sostres, *La ciudad prometida: pobladores y organizaciones sociales en El Alto* (La Paz: SYSTEMA : ILDIS, 1989).

106 Randolph Normann Cárdenas Plaza, Edwin Mamani Aruquipa, and Sandra Beatriz Sejas Rivero, *Arquitecturas emergentes en El Alto: el fenómeno estético como integración cultural* (La Paz: Gobierno Municipal de El Alto, 2010); Cuadros, *La Paz*; Programa de las Naciones Unidas para el Medio Ambiente, *Perspectivas*; Indaburu, 'Evaluación de la ciudad de El Alto'.



Figs.93-4 The locations of Ciudad Satélite (1), San Miguel (2), Villa Adela (3), Río Seco (4), and Quiswaras (5) housing projects are highlighted in red circles in the satellite images from 1985 (top) and 2020 (bottom). These projects were instrumental in pioneering the urban expansion of La Paz towards the valley via San Miguel, and towards the El Alto plateau. Source: Google Earth imagery, intervened by the author.

World Bank's 'war on poverty' accentuated an approach anchored in slum upgrading and Sites and Services, reiterating El Alto's significance as an urban developmental core.[figs.93-4]

Ciudad Satélite and Río Seco have been considered landmarks of urbanisation in El Alto. Concurrently, the San Miguel neighbourhood symbolises the hinge point of southward expansion for La Paz's economic elite. It is necessary to underscore that while US housing aid has influenced Bolivia's urban trajectory, such influences should be interpreted within an inter-American continuum. They should not be oversimplified as unidirectional impositions emanating from Washington onto a purportedly passive populace in the southern hemisphere.

* * *

El Alto has played a pivotal role in Bolivia's socio-political landscape in recent times. The city witnessed the 2003 uprising, termed the Gas War. This revolt, marked by a mix of peaceful and violent protests, opposed the sale of natural gas via Chile. As a consequence, President Gonzalo Sánchez de Lozada relinquished his office. Subsequently, in the 2006 elections, Evo Morales was elected President, marking a transformative era in Bolivia that lasted from 2006 to 2019. Foreign aid went through uncertain times. In 2013, Morales announced the expulsion of USAID, while in 2014, he acknowledged a shift in relations with the World Bank, stating at the inauguration of two health centres: 'Previously, the World Bank was our enemy; now it is our friend.'[107]

El Alto has also seen the emergence of a middle-class economic segment and rising entrepreneurs, deeply connected to their city. A notable architectural innovation, dubbed 'cholets', has become emblematic of this entrepreneurial wave. These multi-

107 Redacción Central, 'Evo afirma que el Banco Mundial pasó de ser un enemigo a ser nuestro amigo', News, Los Tiempos, 10 May 2014, https://www.lostiempos.com/actualidad/economia/20140510/evo-afirma-que-bm-paso-ser-enemigo-ser-nuestro-amigo, accessed 01 May 2022; World Bank, 'World Bank-BOLIVIA: President Evo Morales: "Previously, the World Bank was our enemy; now it is our friend."', Press release, World Bank, 12 May 2014, https://www.worldbank.org/en/news/press-release/2014/05/12/evo-centro-de-salud, accessed 01 May 2022.

Fig. 95 On the left, architect Santos Churata (2021), on the right, architect Freddy Mamani (2013). Photograph by Sergio Escobar, 2022.

functional buildings combine commercial spaces, event and sports venues, rental accommodation, and the owners' residences.[108] Originating about two decades ago with a few El Alto architects, these structures reflect diverse narratives. The most prominent among them is the work of Freddy Mamani, an architect of Aymara descent. Mamani initially started as a bricklayer, only formalising his architectural education after constructing his early buildings. His designs incorporate elements of his indigenous heritage into the vibrant façades and interiors, mirroring the geometries and colours found in traditional textiles and other motifs.[fig.95]

This visual language has merged with Western 'pop' influences, as seen in the inclusion of imagery such as Transformers

108 Cárdenas Plaza, Mamani Aruquipa, and Sejas Rivero, *Arquitecturas emergentes*; Samuel Hilari, 'Otros futuros: análisis y especulaciones sobre la construcción de ciudad en El Alto - Bolivia' (Master in Architecture, Santiago de Chile, Pontificia Universidad Católica de Chile, 2022).

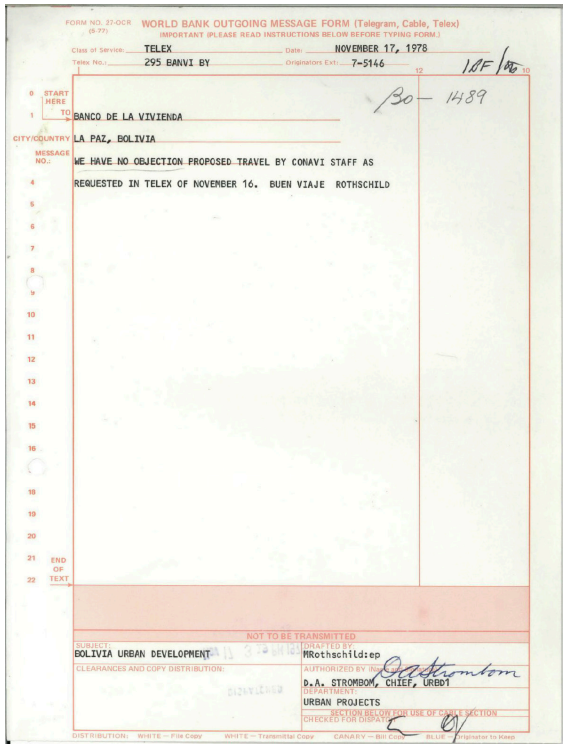
and figures like Iron Man. This blend creates a unique cultural fusion, once again intertweaving local and global elements, and forging a distinct identity for El Alto. While this architectural trend has attracted criticism from Bolivia's architectural academia, it has also earned acclaim and support from local government entities.

Conclusion

Architecture and Development in the urban Cold War

Throughout this research, numerous trajectories of expert travel and the exchange of architectural ideas across the Americas were explored. These included journeys from Washington DC to Santiago de Chile, where Osborne T. Boyd's US mission advocated for low-cost construction strategies and helped to initiate an aided self-help housing programme in the southern South American nation. Additionally, from Cambridge, US, Leonard Currie resigned from Harvard University to fly to Bogotá, Colombia, to head the newly established Inter-American Housing Centre, CINVA. This centre became a hub for professionals from across the continent to converge and collaborate. Charles Abrams' vision, as part of his UN mission from New York to El Alto, envisaged the Bolivian highlands as an ideal, expansive area for affordable urban development and the spread of homeownership, targeting the country's lowest-income population. Similarly, Theodore Atha of World Homes departed from Wichita to La Paz to develop new property markets aimed at the middle class. Finally, from Cambridge, but this time originating from MIT, architect and academic Horacio Caminos advised on the construction of low-cost housing, contributing to the development of El Alto as a major growth pole. These diverse journeys and engagements highlighted the transnational scale of architectural expertise during this period, emphasising the continental interconnectedness of housing strategies and policies.

These transnational movements from North to South America were rendered possible due to the Cold War context.



FORM NO. 27-OCR (5-77) WORLD BANK OUTGOING MESSAGE FORM (Telegram, Cable, Telex)
IMPORTANT (PLEASE READ INSTRUCTIONS BELOW BEFORE TYPING FORM.)

Class of Service: TELEX Date: NOVEMBER 17, 1978
Telex No.: 295 BANVI BY Originators Ext.: 7-5146

1 OF 1

30 — 1489

START HERE
TO: BANCO DE LA VIVIENDA
CITY/COUNTRY: LA PAZ, BOLIVIA
MESSAGE NO.:
WE HAVE NO OBJECTION PROPOSED TRAVEL BY CONAVI STAFF AS
REQUESTED IN TELEX OF NOVEMBER 16. BUEN VIAJE ROTHSCHILD
END OF TEXT

NOT TO BE TRANSMITTED

SUBJECT: BOLIVIA URBAN DEVELOPMENT
DRAFTED BY: MRothschild:ep
CLEARANCES AND COPY DISTRIBUTION:
AUTHORIZED BY: D.A. STROMBOM
DEPARTMENT: URBAN PROJECTS
SECTION BELOW FOR USE OF CABLE SECTION
CHECKED FOR DISPATCH

DISTRIBUTION: WHITE — File Copy WHITE — Transmittal Copy CANARY — Bill Copy BLUE — Originator to Keep

Fig.1 'Buen viaje'. Source: Rotschild, Mario. 'Telex to Banco de La Vivienda, Bolivia', 17 November 1978. Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 4, Folder ID 30112096, WB.

A wide range of projects and programmes, spanning various domains, received support and funding as part of the US's geopolitical expansion on a global scale. This extensive reach encompassed diverse areas, from military involvements and the space race to the international spread of US culture via the film industry, literature, music, design, theatre, and the visual arts.[1] In terms of territorial and urban development, these expert-led trajectories facilitated the construction of large-scale infrastructures, such as dams and highways. These projects were aimed at bolstering national economic growth and mitigating the 'threat' of poverty in development countries. Additionally, there was a notable expansion of markets, exemplified among many by the Hilton hotels, which were designed, constructed, and operated as US embassies in cities worldwide.[2]

This thesis aimed to contribute to the broader narrative by delving into the architectures of these North-South dynamics during the Cold War, particularly in the urban 'battlefield'. It focused on the crossroads of housing and development discourses in Latin America, a region intertwined with US interests. The study underscored the rapid urban population growth in Latin America during the latter half of the twentieth century, examining how these architectural endeavours impacted on the shape of the region's urban fabrics.

'Buen viaje,' or 'have a good trip,' was the farewell offered in Spanish by a World Bank official to the team from Bolivia's Housing Council as they received approval for funds to finance a journey, this time from South to North.[fig.1] This travel, embarking from La Paz, would see Jaime Murillo Palacios —the young Bolivian government architect who drafted the initial plans for the El

1 Louis Menand, *The Free World: Art and Thought in the Cold War* (New York: Farrar, Straus and Giroux, 2021); Frances Stonor Saunders, *Who Paid the Piper?: The CIA and the Cultural Cold War* (London: Granta Books, 1999); David Crowley and Jane Pavitt, eds., *Cold War Modern: Design 1945-1970* (London: V&A Publishing, 2008); Jane Pavitt, *Fear and Fashion in the Cold War* (London: V&A Publishing, 2008); Christina Klein, *Cold War Orientalism: Asia in the Middlebrow Imagination, 1945-1961* (Berkeley: University of California Press, 2003).
2 Wharton, *Building the Cold War*.

Alto Sites and Services project— make stops in El Salvador and Guatemala to review housing projects. The final destination was the Boston area, where he would meet Horacio Caminos at MIT, who would, only months later, travel to El Alto, as introduced on the first page of this thesis. This reflects, perhaps too literally, what historian Gorelik has termed a metaphorical 'back-and-forth' journey between Latin America and the US.[3] Additionally, as Jorge Rivera Salazar indicated before another trip from La Paz to San Salvador and Washington, these journeys were not only about 'gaining valuable experience to make necessary adjustments to our proposed project' but also allowed Bolivian architects to 'contribute our expertise in our field'.[4] This was especially pertinent regarding Acción Comunal, led by Rivera, which gained recognition from World Bank experts and extended CINVA's learning.

While the inaugural paragraph of this conclusion recounts departures from US cities such as Washington, Cambridge, New York, or Wichita, the thesis's ambition was to navigate beyond these points of origin. It aimed to map the crisscrossing paths between the North and South, observing contact zones and the exchange as articulated in Rivera's correspondence. Following approaches like those of architectural historian Łukasz Stanek,[5] emphasis was placed on closely examining the project destinations —cities like Santiago, Bogotá, or La Paz— seeking insights from local archives and contemporary actors, which could complement or challenge prevailing documents and accounts. This research lens tracked the urban impacts of three development discourses during the Cold War in Latin America, illuminating the processes through which ideas were transmitted, challenged, and ultimately adapted to their new contexts.[6]

3 Gorelik, 'Pan-American Routes'.

4 Jorge Rivera Salazar, 'Letter to D. A. Strombom', 13 November 1978, Urban Development Project - Bolivia - Loan 1489 - P006132 - Correspondence - Volume 4, Folder ID 30112096, WB.

5 Stanek, *Architecture in Global Socialism*.

6 The three periods examined in the thesis further highlight the tensions between architecture and development. A recurring negative consequence in the pursuit of 'development' through housing across all three periods was the massive expansion of social segregation within Latin American cities.

In the period beginning with the Point Four, the technical assistance programme promoted paradoxical 'homeless' neighbourhoods intended to mitigate the housing crisis. This initiative encouraged private ownership of single-family plots for incremental development through the homeowners' own labour. The Chilean case showed how these ideas were introduced incipiently in the 1950s with North-South and South-South collaborations, and then expanded nationally in the 1960s, only to be paused in the 1970s. Just as it was paradoxical that the housing solution had no houses, so too were some of the building solutions being promoted. Housing projects in Puerto Rico —constructed with cement blocks and concrete slabs— were subtly criticised by Leonard Currie, who demonstrated in his photographs and research an interest in understanding the vernacular architecture and local construction techniques of Latin American countries. Currie's name tends to disappear behind the CINVA academics he gathered, who developed concepts such as Progressive Development in Housing Design, stemming from Howard T. Fisher's ideas and furthered by Chilean architect René Eyheralde, or community development outlined by the Brazilian social worker Josephina Albano, together with the Colombian sociologist Orlando Fals Borda and the Argentine architect Ernesto Vautier. This interdisciplinary approach to housing, with a strong focus on community organisation pioneered by CINVA in the 1950s, gradually faded away, but resurfaced in the 1960s and 1970s Bolivia through the efforts of local architects like Guillermo Sanjinés Rojas and Jorge Rivera Salazar.

This thesis highlighted the rapid construction of housing projects facilitated by Alliance for Progress funding, through the development of satellite cities and neighbourhood units, formalising an inter-American trajectory of architectural, urban design, and planning ideas. Throughout Bolivia, it explored

how loans were conditional on institutional restructuring in local housing agencies ultimately contributing to projects such as Ciudad Satélite —a suburban neighbourhood of single-family homes in the then-deserted lands of El Alto. The economic backing and the ambition to expand the middle class —integral to the period's development agenda— were capitalised on by companies like World Homes, which engaged US business figures such as Howard Wenzel to collaborate with local architects like Peruvian Ernesto Aramburu, and Ted Atha to refine the initial urban designs of Bolivian Fernando Castillo Navas for the San Miguel project. The resulting bipolar urban expansion, towards both the plateau of El Alto and the southern region of the La Paz valley, starkly illustrated the socio-economic segregation fostered by the development strategies of the 1960s.

The World Bank's massive housing agenda incorporated technical assistance and financial backing for a vast array of urban projects, reaching across a diverse of geographical and cultural landscapes. This venture extended beyond designing and funding housing projects. It necessitated land market reforms, the establishment of new economic and administrative institutions, and the training of local expertise to ensure the replicability of the introduced concepts. With an overarching aim to 'eradicate absolute poverty' and satisfy the basic needs of communities, the Bank's urban operations embraced the complex evolution of aided self-help housing. This approach not only established neighbourhoods featuring 'modern' housing under the Sites and Services programme but also pioneered Slum Upgrading strategies. In Bolivia these initiatives resonated with the existing local trajectory of Acción Comunal within the Mayor's Office of La Paz.

Bolivia presented a unique case for understanding the urban impacts of the architecture and development agendas within

the context of the Cold War. A detailed examination of the trajectories of ideas in La Paz and El Alto, through their laws, actors, and institutions, brought to light pioneering initiatives in the region, such as the 1954 Bolivian urban reform —this reform deserves further investigation to fully grasp its impact. During the quest for archival materials at the World Bank and CINVA, the rarely known housing studies by architect Walter Murillo Salcedo emerged. Murillo, remembered by some interviewees as a quiet drawing teacher, was active in Bolivian housing institutions from the 1950s to the 1970s, but no less critical of them, as his documents indicate —Murillo's professional trajectory and his involvement in Bolivia's institutional landscape merit further exploration. Furthermore, the work of Acción Comunal in La Paz, which received funding from the Alliance for Progress in the 1960s and the World Bank in the 1970s, highlighted a focus on community work and organization in addressing urban challenges that can be further investigated.

The thesis' exploration of housing in Bolivia, with a particular focus on La Paz and El Alto, not only sheds light on the specific urban impacts across the three development periods under study but also unveiled complex layers of inter-American engagement. This analysis provided a nuanced perspective that moved beyond the conventional North-South discourse, revealing a more intricate network of architectural influence and transnational exchange.

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CU1 Jacob Leslie Crane papers, Cornell University Library, Division of Rare and Manuscript Collections.
CU2 Charles Abrams papers 1923-1970, Cornell University Library, Division of Rare and Manuscript Collections.
MOPSV Archive of the Ministry of Public Works, Services and Housing, Bolivia.
NARA National Archives and Records Administration, College Park, MD, US.
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