Part 3

Participation and Network-Building

Chambimbal

Community Empowerment and Participation at the Inter-American Housing and Planning Center (CINVA)

Industrial consolidation in Latin America mostly occurred between the two World Wars. An accelerated movement and concentration of population took place in the main cities of Colombia and similarly across Latin America during this period. However, in Colombia, this process was intensified due to the political violence and the riots that followed the assassination of the liberal leader and presidential candidate Jorge Eliécer Gaitán in 1948. According to documents within the Inter-American Housing and Planning Center—Centro *Interamericano de Vivienda y Planeamiento* (CINVA) archive at the National University of Colombia, the population in Bogotá doubled in a timeframe of twelve years; whilst in 1938 Bogotá had 350,000 inhabitants, by the early 1950s its population grew to nearly 700,000 (Peña, 2010). In response, one of the fundamental proposals of the Colombian National Estate and the Organization of American States (OAS) was to mitigate further social and political unrest due to spatial segregation, poor housing, and deficient public services infrastructure, as well as the extreme contrasts in the distribution of wealth—all consequences of this mobility. With Colombian ex-president Alberto Lleras Camargo as its first Secretary, one of the main points in the agenda the OAS prioritized was to facilitate housing proposals to the greatest number of inhabitants in cities and rural areas.[1] It is within this context that the Program of Technical Cooperation—the agreement under which Bogotá was selected as the city to host the Inter-American Housing and Planning Center—*Centro Interamericano de Vivienda y Planeamiento* (CINVA) was signed at the Organization of the American States (OAS).

CINVA was inaugurated in Bogotá in 1952 (Calvo Isaza 2013, Medina 2021).[2] As an early precursor as a site of education and an experimental center for urban planning and housing projects, CINVA was, from its inception, considered an academic model in terms of research methods, technical and interdisciplinary

Figure 1: CINVA (Inter-American Housing and Planning Center), *Universidad Nacional de Colombia*, Bogotá.

approaches. It also quickly became a mandatory reference in research and postgraduate studies across Latin America, as well as a reference for the development of new academic programs, such as the Social Sciences School at Colombia's National University.

CINVA was conceived as an educational project where trainees worked together with a range of urban and rural communities, a defining characteristic of what more recently has been referred to as characteristic of DesignBuild projects. As an educational institution, CINVA welcomed trainees from multiple countries of the OAS across South and Central America and the Caribbean. These funded trainees were professionals with varied backgrounds that came to be part of a one-year program with a focus on experimentation and investigation around housing (both rural and urban), on dissemination of knowledge, and on technical consultancy for the improvement of housing. Methodologically, a strong emphasis on technical experimentation, field work, participatory methods, and community building were at its core (*Universidad Nacional,* 1954). Trainees were joined by exchange students from universities from abroad, mainly from the American continent, as well as by a range of Colombian postgraduate students who were part of the taught modules or participated in research projects led by some of CINVA's staff and consultants (Rivera Pérez, 2002: 118).[3]

At CINVA, research was applied and the curriculum defined by the relationships of CINVA with other housing research centers and public policies. Under the supervision of the Division of Planning and Housing of the Pan-American Union, CINVA worked autonomously both technically and administratively, facilitating the coordination between universities and official housing, planning, and economic development programs across Latin America.

Colombia's National University in collaboration with the Institute of Territorial Credit—*Instituto de Crédito Territorial* (ICT)—acted as CINVA's hosts (Niño, 1987: 52).[4] A new building was designed and constructed at the campus of Colombia's National University in Bogotá by CINVA staff members.[5] The building hosted the institution until 1972, when CINVA's activities ceased (Figure 1).[6] US architect and first director at CINVA, Leonard Currie argued that CINVA's approach to housing was expressed in the architecture of the building. In Currie's words, the purpose-built building "did not strive for monumentality," with no permitted design clichés, and determined by its "functional requirements, available materials, and established building techniques, site and climate, convenience, and non-assertive harmony (*Architectural Record*, 1957)." Furthermore, for Currie, CINVA would confront the housing deficit in Latin America by developing the basis of what he designated as the "science of housing (Ramírez Nieto, 2022)."[7] For Currie, CINVA's training program and publications, interprofessional knowledge, and collaboration achieved distinct solutions: forms that grew, emerged from local traditions, responded to patterns of local culture, and were responsive to local materials and weather (Currie, 1955; Romero, 2021: 28–39).[8] Already at its early stages, CINVA's interprofessional field work—and its approach to theory and working methods—could only be rarely found in Colombia, or in the wider world.

Today, CINVA is still mostly recognized within architectural history and practice because of the CINVA-ram block press: a simple and low-cost portable machine for making building blocks and tiles from soil developed by Chilean engineer Raúl Ramírez. Also, due to the iconic large-scale housing development in Bogotá, Ciudad Kennedy, which was the largest build in Latin America under the Alliance of Progress (Offner, 2018: 47-70).[9] However, in this chapter it is argued that beyond CINVA's technical and managerial contribution, it was CINVA's social work that also left an imprint across CINVA's housing campaigns across Colombia and Latin America. Thus, this chapter focuses on Chambimbal (1955), one of CINVA's early rural housing campaigns led by Argentinian architect Ernesto Vautier, Brazilian social worker and director of the Social Service Section at OAS, Maria Josephina Rabello Albano, and Colombian sociologist Orland Fals Borda, all three widely recognized scholars, practitioners, and activists in their fields. Within CINVA, Chambimbal embodies a significant moment: it was an early housing campaign and the first collaboration between Albano, Fals Borda, and Vautier, three

important figures in terms of applied research and participatory methods. This intersection allows one to draw out the emergence and consolidation of participatory methodologies, the roots of community participation and mutual help, as well as the agency of education within these that defined CINVA's thought and ac-tion. Highlighting the development of collaborative practices in Chambimbal that shaped CINVA from its inception which range from construction, to community organization and forms of governance, this chapter emphasizes the importance of the symbiotic relationship between what Fals Borda described as "people's and scientific knowledge," an approach today recognized as the grounding basis of Fals Borda's Participative Action Research framework, PAR (Gutierrez, 2016).[10] Chambimbal is also a project that is exceptionally well documented, and from which larger conversations and publications around community participation emerged.

When considering CINVA as a precursor of DesignBuild, what CINVA suggests is that it is necessary to expand DesignBuild's definition in terms of its reach, scope, and scale. CINVA was a postgraduate training program where trainees from across South and Central America worked jointly with CINVA's advisors, staff, and communities, and in some cases with university students. CINVA had a twenty-year duration where management, governance, technical aid, mutual help, and collaborative practices where at its core—even if its projects varied in duration and scope and had spatial and social implications across Latin America and beyond.

CINVA

In its twenty years of operation, CINVA led seventeen different programs, delivered sixty-two modules from 1952–72, and trained 1450 professionals (Rivera Pérez, 2002).[11] Trainees were selected and guaranteed a balance between background knowledge and expertise (Ramírez Nieto, 2022). Candidates from multiple countries and backgrounds were selected by their home countries through calls open to experienced professionals with background experience in housing and with an ongoing working contract with a governmental institution. This selection process points to CINVA's belief that the housing deficit could not be addressed through architecture alone. It also explains the wide range of housing projects that CINVA attended to, as fellows were bringing with them their professional experience but also suggestions of projects in their home countries that CINVA would respond to.

CINVA consisted of a significant number of projects and modules delivered across Latin America, which have so far gone unnoticed due to the project's scale and scope making it impossible to address in the brevity of this chapter. However,

Figure 2: 1953 CINVA fellows, Bogotá.

Figure 3: Photograph during CINVA visits to the Perseverancia neighborhood Bogotá, 1953.

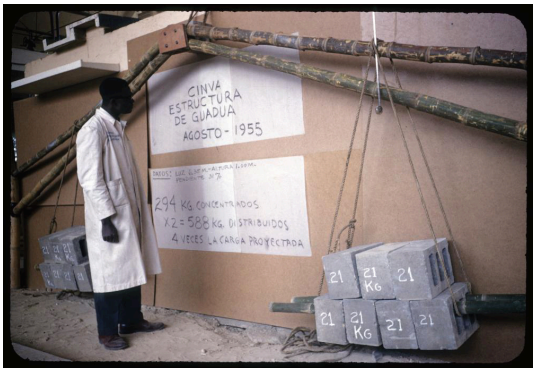


Figure 4: CINVA fellow photographed with a bamboo structure being tested, Bogotá, 1955.

Figure 5: CINVA Laboratory, Bogotá, 1952.

they are essential for the understanding of CINVA's role in driving the consolidation of social projects across Latin America and beyond. Projects included developing of rural housing in Colombia (Anolaima, Líbano, San Jerónimo, Chambimbal, and Saucío amongst others) and other places in Latin America (Aroma in Bolivia, Manzanillo, La Cruz in the Dominican Republic, and the urban peripheries of Caleras and Morelos in México), technical innovation (CINVA-ram block machine), and research on materials and construction methods (that ranged from assessing ICT's project in Quiroga's neighborhood in Bogotá, research on stabilized soil, bamboo construction, concrete prefabricated elements, and modular blocks outcome of the CINVA-ram machine), urban peripheral housing in Colombia (Yocoto, Sogamoso, Siloé, Soacha), self-built projects (Arequipa and La Chalaca in Perú,

Laches and Periquillo in Colombia and Barquisimiento in Venezuela), and experimental houses and large-scale, low-income housing projects (San José de Costa Rica, Ciudad Kennedy in Bogotá, Valencia in Venezuela, Juan del Corral in Medellín Colombia, Colonia Presidente Kennedy in Tegucigalpa, Honduras). Taught modules were also delivered in different Latin American territories, such as Minas Gerais, Recife and Rio de Janeiro (Brazil), Chaco (Argentina), Arequipa and Piapur Lima (Perú), La Paz (Bolivia), Santo Domingo (Dominican Republic), Barquisimento (Venezuela), Tegucigalpa (Honduras), Córdoba (Argentina), Santiago de Chile (Chile), Costa Rica, El Salvador, and Ecuador, as well as different Colombian regions (Armenia, Chinacota, Villa de Leyva, and Bogotá).

In the same way it is important to recognize that CINVA's early years (1952–56) were characterized by a technical response to the growth of cities and the housing deficit. During these years the world changed fast, especially Latin America due to the rise of dictatorships like that of Gustavo Rojas Pinilla (1953–57) in Colombia, the military dictatorship in Venezuela (1948–58), Juscelino Kubistchek in Brazil (1956–61), and the military dictatorship of Augusto Pinochet in Chile (1973–90) amongst others.[12] The challenge was to understand how to operate within these specific Latin American situations and conditions, where there was no homogeneity but shared urban challenges. The seminars on rural housing from 1956 onwards became an anchor to understand these geopolitical particularities.

As a response to the housing crisis and to low-cost housing, CINVA had four principal approaches: training, research, directed technical support, and scientific exchange. In terms of the curriculum, these were addressed within CINVA's yearly curriculum that consisted of: a first stage consisting of (1) an orientation course and (2) visits to selected sites and institutions (Figure 2 and 3). A second stage consisting of (3) a basic course, and (4) specialized taught modules that included two of CINVA's most important taught modules, the Regular Module on Housing (*Curso Regular de Vivienda*) and the Regional Module on Rural Housing (*Curso Regional de Vivienda Rural*).[13] These were delivered by technical and specialized staff selected directly by the OAS (Rivera Pérez, 2002).[14] A third stage was characterized by (5) training projects and (6) research practices and a fourth stage consisted of (7) individual studies and internships, defined by practical experience. During the fourth stage each fellow was part of two group projects—one urban and one rural—and one individual project that could be suggested by CINVA or by the government of the fellow's country of origin. Finally, (8) the final stage of recapitulation.

CINVA started its activities on the transformational capacities of technical developments with great confidence. It focused its efforts on developing materials and built structures to reduce housing costs. For example, during CINVA's early years, the design and construction of prefabricated elements and structures such as

stairs, roofs, windows, walls, and foundations, and the integration of local materials such as bamboo, rammed earth, and cement-floors into the construction processes were one of CINVA's greatest focuses. These were firstly tested at CINVA's laboratories to then be mobilized to CINVA's construction sites and projects (Figure 4 and 5). Ramirez's CINVA-Ram is also an example of these developments (Figure 6). However, research and education at CINVA were not limited to technical methods of construction nor the use of construction materials only. From its beginnings, Leonard Currie and CINVA's teaching staff, the Colombian architect Cesar Garcés, Argentinian architect Ernesto Vautier, and Peruvian engineer David Vega-Christie, emphasized the role of teamwork and interdisciplinary work; a methodological approach that soon characterized most of CINVA's operations, becoming CINVA's structural pillars.

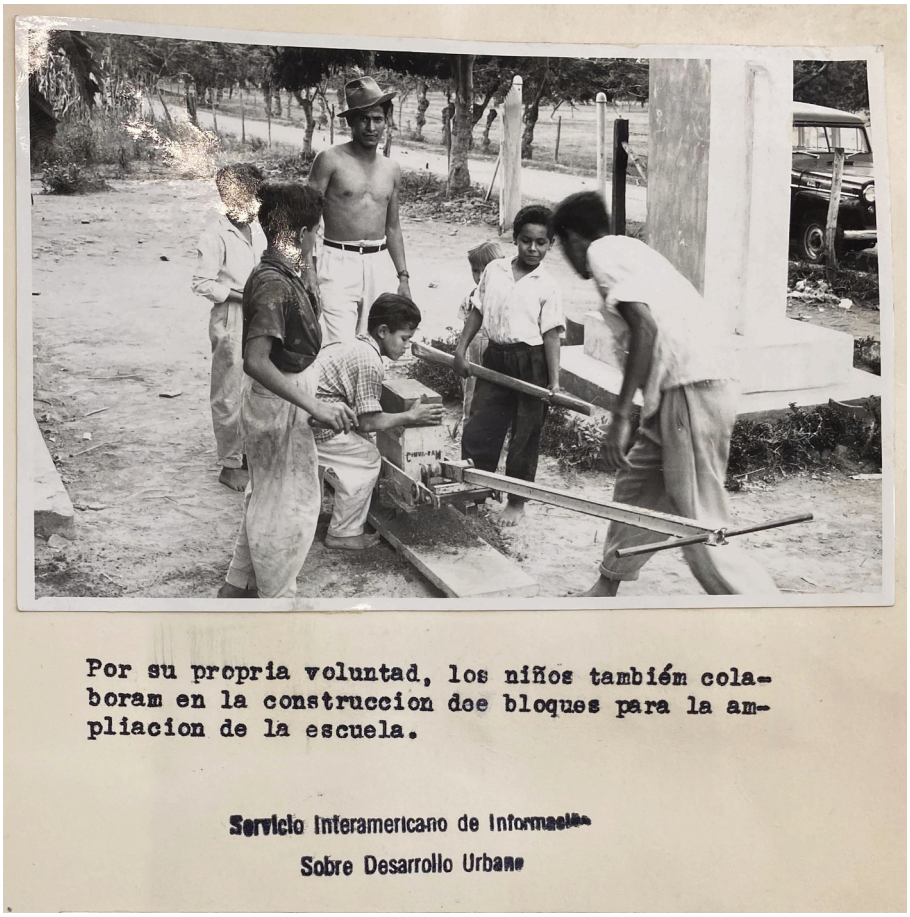


Figure 6: CINVA-ram being used in Chambimbal by fellows and the community, 1955.

Chambimbal

Chambimbal is a *vereda*, small housing settlement in the countryside, in the Department of Valle del Cauca in southwest Colombia. By 1955 Chambimbal accommodated approximately 45 families of small owners and tenants, mainly dedicated to agriculture. CINVA's aim was to support Chambimbal's inhabitants in overcoming their housing deficit and deficiency, which, in the words of Albano, Fals Borda, and Vautier, was inextricably related with an underlying educational problem rooted in a lack of knowledge of their context, reality, and environment, and holding an important potential for improvement through ownership and empowerment.

At Chambimbal, Albano, Fals Borda, and Vautier worked together in developing a participation methodology that later characterized CINVA, which established a relationship between planning—in physical terms—and social work. This approach drew upon Caroline Ware, a social worker from the US who visited Bogotá in 1953 invited by Bogota's City Council to support the definition of their Communal Action Plan in the context of CINVA's activities in the capital city (Currie, 1953). During her visit, Ware delivered a series of lectures at CINVA to support the development of social work with communities which, within CINVA, had already initiated processes of mutual help. One of Ware's most influential lines of work was the understanding that, it is only when the individuals, families, or communities participate in the solution of their own problems that any help or support provided would be valuable and permanent.[15] Ware's approach, informed by Puerto Rico's experience in mutual help schemes, some housing projects in Venezuela, and by her role as consultant of the Social Work and Work Division and Social Matters at the Pan-American Union, could be explained under two premises: firstly, that in many countries there was a new hybrid migrant population that was not used to the poverty-stricken conditions and marginalization they were forced into, and secondly, the needs of this population would never be fulfilled by technical or economic resources alone (Albano, 1957).[16]

In Chambimbal, Ware's approach was more democratic, educational, and local, as one of the guiding principles established by Albano, Fals Borda, and Vautier was to respond to the conditions and resources on the ground. This participation methodology was also informed by CINVA's earlier experiences and also became part of the module Regular Course on Housing (*Curso Regular de Vivienda*), and then expanded in Albano's, Fals Borda's, and Vautier's *Manual de Investigación y Extensión en Vivienda Social* (Manual of Research and Extension in Social Housing) (Figure 7).

Albano, Fals Borda, and Vautier's emphasis was placed in training Chambimbal's community to work towards a more active engagement and improvement of all aspects of life. During Chambimbal's housing campaign, work was directed to-

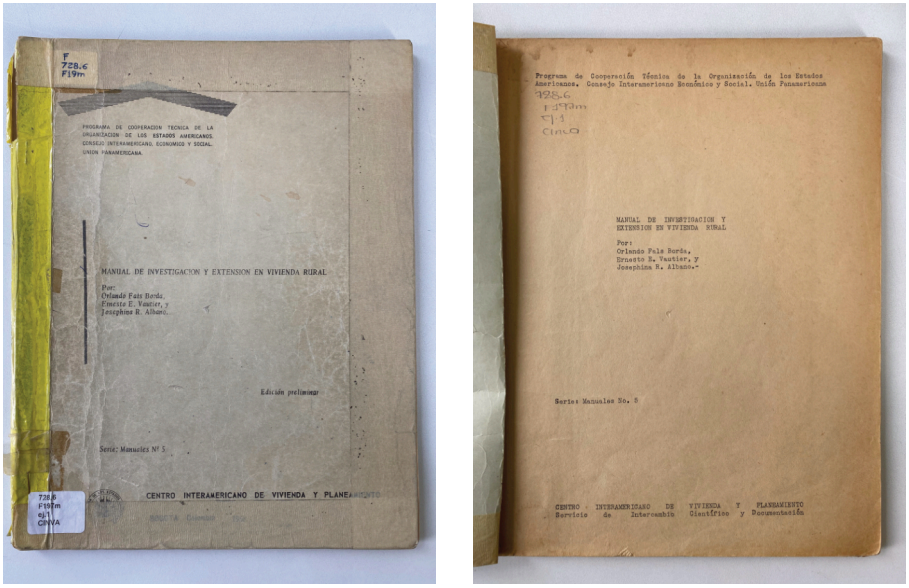


Figure 7: Photographic spreads from *Manual de Investigación y Extensión en Vivienda social.*

wards an activation and awakening of Chambimbal's human, social, and material values. Training sessions took place in the shape of meetings, workshops, and building, and included detailed and conscious study of their challenges and problems, of available resources, and finally through programming and executing plans of action.

Chambimbal's 1957 report illustrates how this was developed in stages (Albano, 1957: 3).[17] The report explains how CINVA's work at Chambimbal began with the familiarization of the reality of the community. The gathering of factual evidence defined the early research stages and involved the understanding of long histories of land occupation, to exhaustive analysis and reports of singular cases, a practice that at this time was rare in the context of new housing and housing upgrade projects (Diaz, 2018: 12). This was followed by the construction of "action programs" that, through interprofessional work, focused on the construction of an experimental housing unit, housing extension campaigns, and specifically for Chambimbal's case, taught modules delivered to the students and staff from the neighboring *Buga's Escuela Normal Agrícola* (Normal Agricultural School) who would support the experimental house construction and would later liaise with the community to support agricultural practices (Albano, 1957). Chambimbal's rural housing project then concluded with setting a series of recommendations to the newly formed Neighborhood Board, who would oversee the continuation

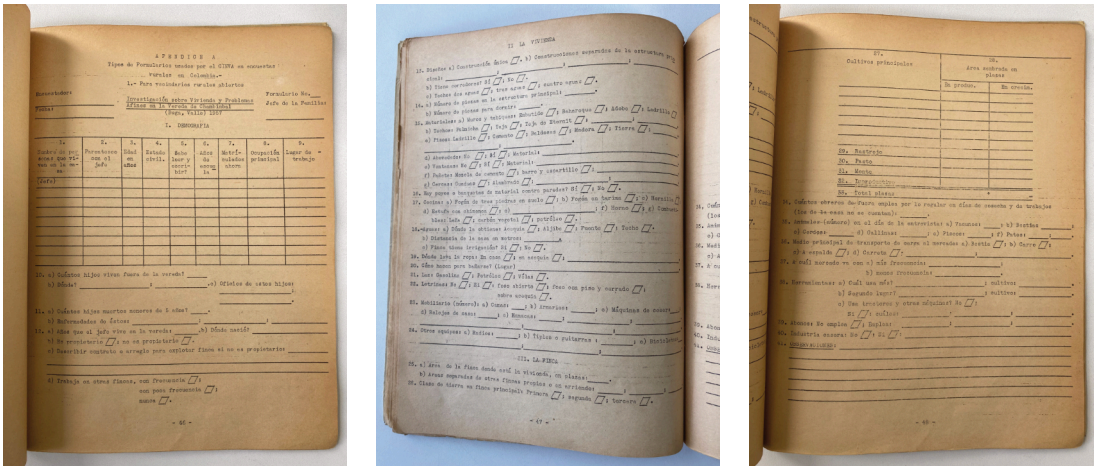


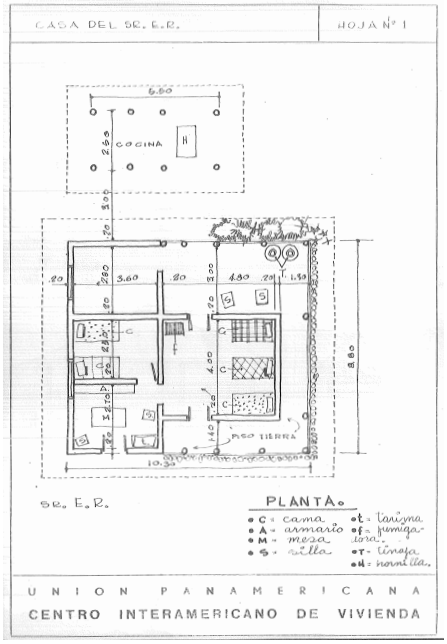
Figure 8: Appendix A, interview format used by CINVA in rural interviews in Colombia from *Manual de Investigación y Extension en Vivienda social.*

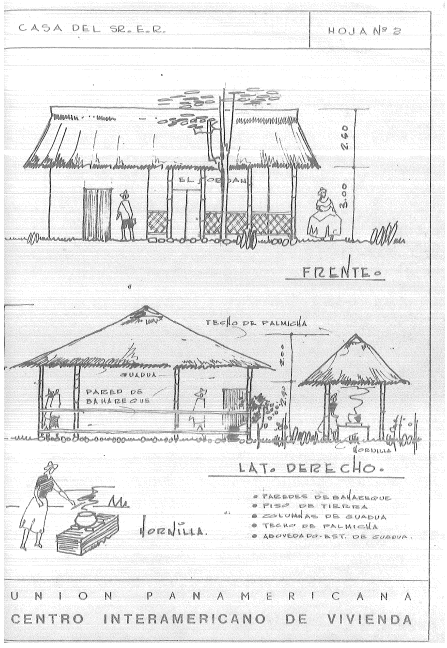
of the already initiated projects and initiatives. This chapter emp-hasizes two distinct moments to illustrate the particularities of CINVA's metho-dology. First, the initial research stage which, according to the 1957 report, was characterized by the encounter of a global context (trainees) with a local reality. Second, the "action program" defined by the construction of the experimental house, hand in hand with what the 1957 report refers to as "community development."

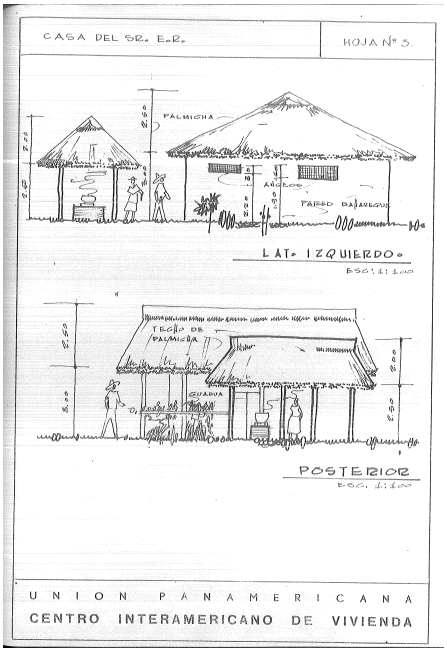
Chambimbal's first stage

Initially, CINVA established connections with local institutions and authorities that would be involved in the process. Fellows from Colombia, Panamá, Costa Rica, Colombia, Venezuela, and Costa Rica trained as architects, agronomists, experts in malaria, and social workers amongst others, made site visits and established and built their own accommodation and work facilities. Through interviews, CINVA trainees aimed to understand Chambimbal's demography, housing, ecology, culture, and personalities (Figure 8). This initial stage was complemented by bibliographical research on Chambimbal's geography, history statistics, and property registers.

As part of the first research stage were also studies on Chambimbal's existing forms of inhabitation. These were approached through a similar, almost scientific approach; through a categorization of spaces and their individual uses, construction elements, and materials (Figure 9). This work, undertaken by CINVA's







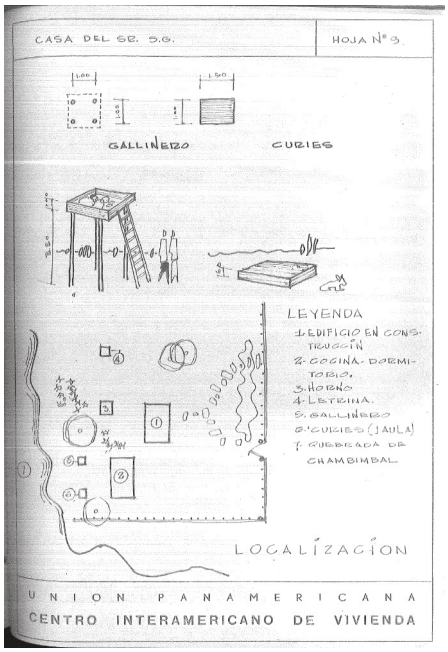


Figure 9: Drawings elaborated by CINVA fellows around the existing housing of Chambimbal. Presentations from Chambimbal Levantamiento Fotografico, 1957.

trainees, described interior domestic spaces, form, and use, as in, for instance bedrooms, corridors, and kitchen. Structures that did not respond to these spatial manifestation of their heritage and mode on inhabitation, are called "secondary structures" in the report. Some are, for instance, latrines, "*caney*" (a bamboo roof under which tobacco is dried), "*enramada*" (a wooden or bamboo structure to protect a water well), or for the outside oven, and the "*gallinero*" (a 2 to 3-meter-high bamboo box held up on stilts) (Figure 10).

Despite its relevance, this initial empirical and ethnographic approach had its limitations, and it is important to acknowledge, that in some cases, it was also problematic. For instance, the language used in the report referred to Chambimbal's population as "these Indians," referring to the Quaimonóes indigenous people, and to "wizards" for the elders even though they were aware of their history of displacement and genocide led by the Spanish colonization in the "history" section of the report (Albano, 1957: 9). There was also a defining distance between interviewer and interviewee characterized by the interview process (Figure 8 and 11). CINVA's methodology of "knowing the community" was clearly defined by an ethnographic approach that allowed, to a limited extent, CINVA's staff and fellows to become familiarized with the territory and community. It was an exercise of data collection and analysis for CINVA's own purposes and on CINVA's own terms.

Chambimbal's action program

The "action program," which included the construction of a 1:1 inhabitable prototype of the experimental house, characterized the second stage of Chambimbal's housing campaign. As in other CINVA's projects, the framework of the "action program" had partially been developed in advance, but as Vautier argued and as in Chambimbal's case, most of the these needed to be further developed in response to the local conditions and challenges and adjusted on the ground. This is how the experimental house was defined by the studies undertaken in the initial stage, and later modified as a result of workshops and exchanges through informal conversation but also structured meetings initially put in place by staff and trainees of CINVA. As part of the "action program" CINVA's housing campaign was communicated in meetings including the local and municipal authorities, church, educational authorities, hygiene centers, radio and newspapers, as well as the regular neighborhood meetings and assemblies that shaped the project day by day. From an almost absent community engagement, the 1957 report illustrates how by the third meeting, a neighborhood assembly was established, and its president elected by popular vote. Chambimbal's experimental house was designed and built by CINVA's fellows and Chambimbal's community in collaboration with staff and students from the *Escuela Normal Agrícola* from Buga (Figure 12 and 13). It was a 75m² unit composed of a dining/living room, kitchen, washing space, bathroom, bedroom, storage

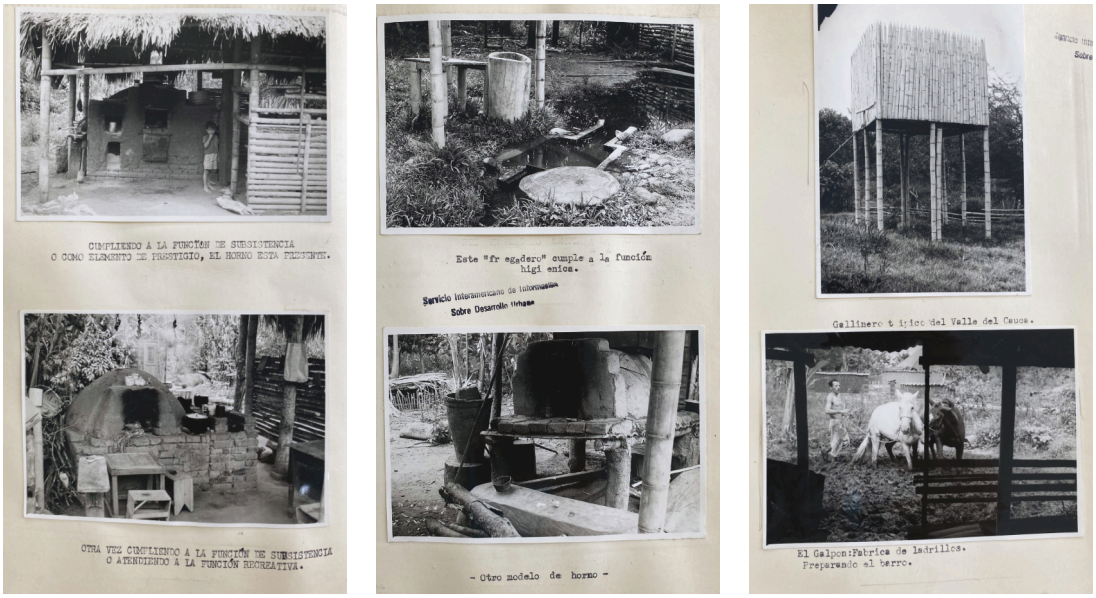


Figure 10: Photographic documentation elaborated by CINVA fellows around the existing housing of Chambimbal, 1957.

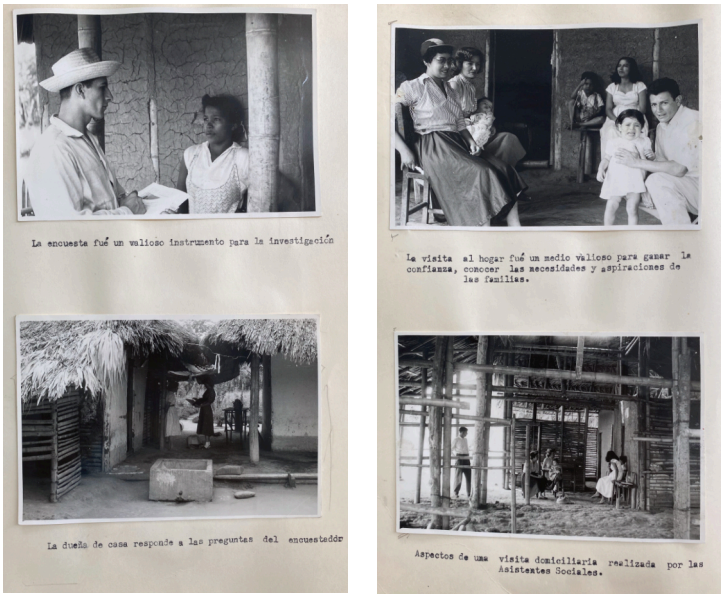


Figure 11: Photographic spreads from Chambimbal Levantamiento Fotografico, 1957.

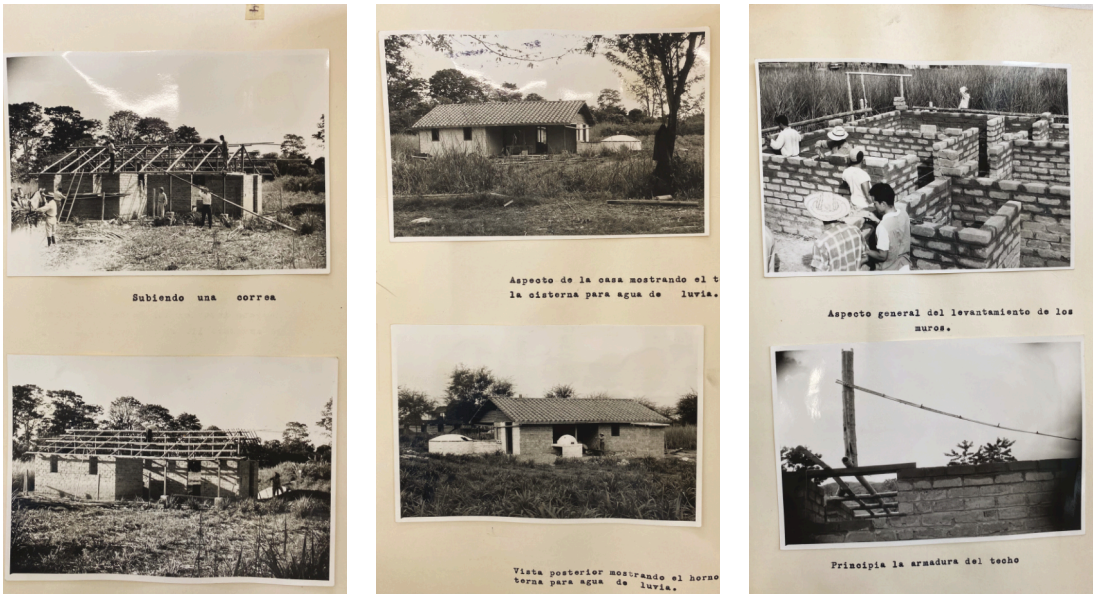


Figure 12: Building process of the experimental house in Chambimbal, 1957.

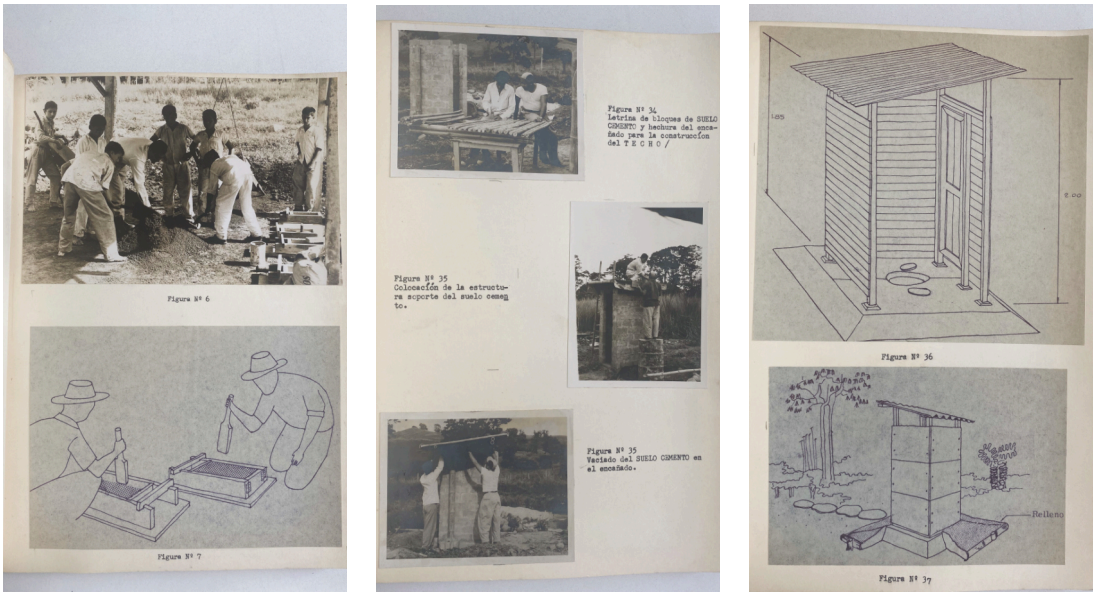


Figure 13: Application of soil cement in Chambimbal's rural housing construction, 1957.

space, and a latrine, a secondary structure that was separate from the house (Albano, 1957: 64). The outcome of its construction with solid earth blocks from the site (aided by the CINVA-ram machine) was a house where spaces were fragmented and compartmentalized. Some even had ceilings (an architectural element absent in the original housing structures found on site), and bamboo roofs covered in clay tiles. As a countering argument from the CINVA team for the choice of material, even if it was more expensive than palmicha (local palm leaves), the clay tiles require the same structure and less maintenance when compared to the palmicha (Albano, 1957: 67).

Chambimbal's experimental house illustrates that throughout CINVA's housing campaigns the predominance of a modular design and construction and questions of construction efficiency, economies, and available local work force, superseded typological experimentation. As in all CINVA's projects, the priority was to guarantee the improvement of a housing scheme supported by CINVA's technical developments and studies, by forms of prefabrication in response to the particularities of the site, by an economy of means (material and labor), and transferable skills. CINVA's "experimental house" prototype was studied in detail in the workshops in Bogotá (an existing 1:1 built example still stands on Colombia's National University campus).

It is worth emphasizing here that as Chambimbal was a rural campaign, it posed particular challenges when thinking about the totality of CINVA's projects. For instance, in Chambimbal, CINVA's team understood the importance of what they had identified as "secondary structures," and complemented the construction of the experimental house with the construction and, in some cases, redesign of these, in partnership with trainees and the Chambimbal's community. This is important, as it sheds light firstly on the role of interpersonal relationships that CINVA's trainees, staff, and the community could strengthen due to the lack of time constraints that characterized some of CINVA's urban projects. Secondly, on the possibility of working through a "secondary structure" essential for a rural population, and not for a hybrid and migratory urban community that characterized most of CINVA's urban projects. Furthermore, as Chambimbal illustrates, the scope of the project focused on housing betterment, and had no infrastructural, industrial, or new housing demands such as, for instance, in the case of Sogamoso, Colombia, that redefined the entire urban-rural area, or as the case of Ciudad Kennedy, whose scale, scope, and population is incomparable. Furthermore, mutual help and participatory action as forms of action and governance also define these projects. As architectural historian Nilce Cristina Aravecchia has demonstrated, Ciudad Kennedy for instance, was seen through the consolidation of social relations between families, housing units, and neighborhoods, as well as in the future inhabitants' participation in all planning stages of the project (Aravecchia-Botas, 2019: 70-81).

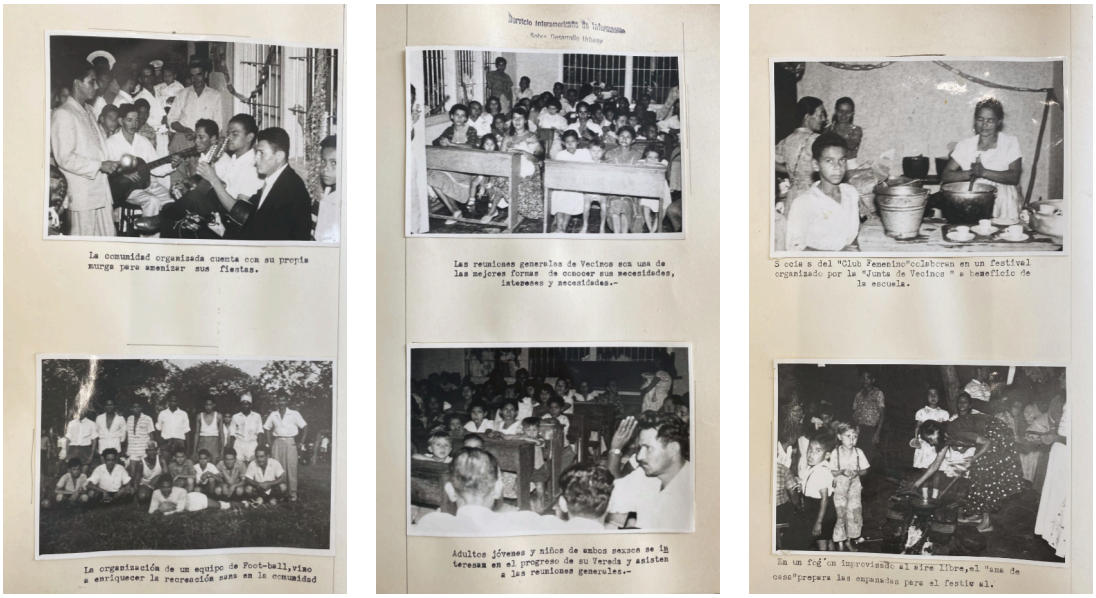


Figure 14: Social work and engagements at Chambimbal, 1957.

Mutual help and participatory work

A lot can be said about the design and spatial organization of the building in Chambimbal, as well as about the interpretation of the sociological and scientific approach that informed the way data was gathered in the interviews. However, what this chapter aims to emphasize is that CINVA's approach to housing through managerial discourse—thinking through efficiency and modes of production, needs to be understood beyond physical structures. In Chambimbal, as in most of CINVA's housing campaigns, there is a strong link between the development and construction of these structures with community participation (Sumplemento Informativo CINVA, 1963).[18]

Mutual help and participatory work sat at the core of all CINVA's projects. In terms of participatory work, Caroline Ware's work was of great influence. As evident in Chambimbal, this understanding informed and complemented CINVA's methodological frameworks. The initial paragraphs of Chambimbal's report from 1957 summarize Vautier, Albano, and Fals Borda's approach to rural housing and community participation. Drawing upon Ware, they emphasized how rural housing problems cannot be solved financially by the future inhabitants due to their low income and therefore lack of available capital, nor by the technicians themselves who would only be able to reduce costs through construction and design.

> "That is why, traditionally, they construct their houses in collaboration with their families and neighbors, and exceptionally, employ a master builder whilst recurring to the most accessible materials in their local environment [...] the peasant therefore gives us a solution to his housing problem, using his own resources and materials, and framed within a cultural framework that his own elders and cultural environment offer."

Vautier, Albano, and Fals Borda further argue:

> "It is not through housing construction that the problem [of housing deficiency] can be solved, but through the strengthening of peoples capable of desiring and bettering their own house [...] The concrete knowledge of their social reality and environment constitutes a starting point for the planning and program of their education. Amongst the diverse problems that affects the population, the housing problem must be considered within the cultural, economic, and physical framework that conditions them. Therefore, the need of researching this reality as a totality, and of framing that action within housing field must be central in the development of the community."
> *(Albano, 1957).*[19]

As seen before, in Chambimbal, social work, community empowerment, and interpersonal and interprofessional relations are transversally present at all stages. However, it is also interesting to see how this is made manifest through-out the 1957 report and how the distance that characterized the initial research stage molded into forms of responsive and intimate forms of engagement. This was thanks to construction workshops described above, informal conversations, as well as CINVA's emphasis in shaping and formalizing distinct participatory forms of governance. The report starts by describing an apathic community that did not trust CINVA's staff nor their proposals of housing improvement. The community, who had no previous experience in community organization and collaboration was reluctant to change and collaborate (Albano, 1957: 70). The neighborhood meetings, one of CINVA's community building mechanisms, were initially characterized by the absence of community interventions and very poor attendance and engagement. As briefly mentioned before, by the third meeting community leaders were elected, and soon after a list of priorities were drawn up by the community, which could not all be met due to the scope of the housing campaign (Albano,

Borda, Vuatier, 1958: 79).[20] However, in response to the community's needs and to CINVA's aims, they focused on the first two needs: the construction of a school and housing betterment through training sessions on construction that led to the experimental house as well as to some of the "secondary structures" mentioned before, whilst focusing on supporting governance models based on community organization and mutual help so that the community could work, and later maintain and continue developing the project together. The weekly neighborhood meeting attendance and the community's engagement and participation improved, albeit slowly. Similarly, was the case for interprofessional meeting of CINVA's staff, local and national institutions, and Chambimbal's inhabitants. The agency of the community leaders elected within the community grew, and a neighborhood association was quickly established. Assisted by CINVA's staff and members, a woman's-only club emerged which later led the housing extension campaign based on their previous experiences and solutions to some of the challenges they faced.

This doesn't mean to imply the initial ethnological approach was insignificant, but that as a methodology characterized by distance and observation, it also pointed to important gaps such as intimacy, trust, embodied understanding of the problematic faced, and a respect and appreciation for local knowledge and skills. However, as the meeting and assemblies of the action program paved the way for a more engaged community, which as the report concludes, was subsequently empowered, and organized, and desired further action.

In Chambimbal, CINVA's role was molded and responsive to the needs and courses of action of the community whilst at the same time empowering the community and building trust in themselves and their material and human resources (Figure 14) (Albano, Fals Borda, Vautier, 1958: 95).[21] CINVA's early framework of mutual help (*ayuda mutua*) and self-built schemes such as Chambimbal informed other processes of communal development in urban rehabilitation projects. An important development took place a couple of years later in Siloé, Cali (1957–58), a neighborhood with 20,000 inhabitants from mining communities that arrived to rented lands within these coal extractive landscape at the beginning of the 20th century. The idea was to "study a community" that synthetized some of the characteristic problems of Latin American cities: "illegal" housing on the peripheries (referred to as "slums"), lack of infrastructure, roads, and housing (*Sumplemento Informativo* CINVA, 1957). Alec S. Bright from the UK directed the project in collaboration with Albano as co-director. Consultants included Rino Levi from Brazil and Fals Borda from Colombia. CINVA's fellows came from México, Argentina, Cuba, Brazil, Perú, Chile, Venezuela, Uruguay, Haití, Colombia, and Nicaragua with professional backgrounds in engineering, law, anthropology, architecture, eco-

nomics, and social work. The emphasis, informed by the work previously undertaken in Chambimbal, was to empower the community towards establishing structures and networks for community participation so that the community could solve their own problems and challenges. From the very early stages of this housing campaign, Siloé's inhabitants shared their concerns about the project's intention and methodological approach. They expressed their worry about the possible clearance of their built environment and future relocation to a new-built social housing project—which was a commonly used approach by then across Latin America (Calvo Isaza, 2013: 76). Initially seen by CINVA as a disorganized and fragmented community that halted some of their field work and approach to community work, what the existing population in Siloé demonstrated was that their community was organized and politically active, but in a way that neither CINVA's staff and fellows, nor the local government were aware of. Therefore, if there is something important about this project it is the multiple and intense conversations and social engagement rather than the spatial, material, or built proposition in small or large scale.

Empowerment and community participation

Beyond technical innovations, what Chambimbal's housing campaign contributes to CINVA—as Siloé and others did—was the potential of organized action through mutual help and education, and one that allowed for "the creation of conditions for the emergence of a new ethos of social action, in which Fals Borda saw one of the deepest meanings of socio-cultural change (Diaz, 2018: 11)." Modernization of rural activities—which in this case is demonstrated by CINVA's managerial and organizational approach to housing and governance—was enhanced by education made manifest through workshops, dialogue, communal neighborhood meetings, interprofessional exchanges, and a multiplicity of exchange platforms. For Josephina Albano, the defense and consolidation of social work and the social worker within CINVA was key as it allowed, in her words, the "discovery of the strengths that move the community, its natural leaders and existing groups; to know the community needs and to awaken their desire for betterment and community work for finding the solution to their shared challenges (Gonçalves, Benmergui, 2022)." For Fals Borda, education was the means by which a passive attitude could progressively transform into an emancipatory attitude for communities. It was also the way for staff and students to lead on forms of research activism that promoted radical change through political innovation. This coincided with the early stages of Participatory Action Research (PAR), a theory and methodological framework that later characterized Fals Borda's work and that recognizes the importance of popular and situated knowledge as knowledge building. As evident in Chambimbal, and feeding into PAR, some of CINVA's guiding principles such as a multidisciplinary approach to housing, and community participation as key

to guarantee continuity to the decisions made by institutional and educational spheres. This approach did not only also inform CINVA in its later stages, but can also be traced in some of DesignBuild examples.

CINVA experienced many changes throughout the years; this chapter offers only a glimpse of a much longer and complex history. CINVA's contributions are of vital importance when recognized in terms of impact for Colombia and Latin America. Even if based at Colombia's National University, CINVA was not only a teaching method or an educational experiment. The importance of participation and mutual-help within CINVA's pedagogies and lines of action are evident in what Colombian architectural historian Ana Patricia Montoya Pino defined as the terms in which CINVA's overall experimental and educational proposal should be understood: (a) community development as a discourse between economic and social development promulgated by international bodies such as de OAS and the CEPAL, (b) the notion of community action, within the framework of community processes, self-built and mutual-help, (c) urban renewal through the rehabilitation of "slums," and lastly, (d) the notion of social housing: affordable, hygienic, productive, and communal (Montoya Pino, 2021:24). But furthermore, what participation and mutual help also informed and shaped were site-specific models of governance still relevant today for low-income, new housing and housing betterment projects, as well as for DesignBuild projects.

Equally, CINVA's contributions are a vital tool for the comprehension of the history of urbanism and urban planning in Colombia and Latin America but still constitute an overlooked gap within international architectural historiography.[22] CINVA was political: on the one hand responding to the OAS and Pan-America demands, whilst on the other hand having its own autonomy and finding its own political grounding in each of the housing and educational projects involved. Its scale was significant. Its housing projects and taught modules were present across Latin America. Throughout its twenty years of operation, it had a significant number of Latin America students and staff, and its contributions in the field of housing and beyond are noteworthy. CINVA's imprint is therefore the consolidation of social structures characterized by the input of local communities, and international fellows and staff involved in teaching, training, and consultancy that characterized the projects as they developed, but that also left traces and tools in all involved. As Jorge Ramírez Nieto argues, CINVA cannot be understood nor studied under the lens of a particular graduate, nor by outstanding built forms as has been characteristically done with architecture schools and large-scale housing enterprises. From its inception CINVA was a collective endeavor where fellows, staff, and communities worked together. CINVA's political, social, and collaborative forms of practice, its value, impact, and lessons of its projects still need to be fully appreciated.

I would like to express my gratitude to Jorge Ramírez Nieto for his generosity in sharing his research and knowledge on CINVA, and Maria Catalina Venegas Raba who undertook all archival work needed for the writing of this paper.

1 In parallel, Europe's reconstruction after the Second World War and the beginning of the Cold War marked a crucial moment for the international transfer of building technologies, building construction techniques, and machinery through multilateral organizations.

2 Colombia's central geographical location (strategic to the OAS), the variety of climates within the country, and the existence of an already strong body of architects, engineers, and advanced construction methods were some of the reasons Colombia was chosen as the place to establish CINVA.

3 CINVA's academic structure was initially developed to have the same duration and administrative structure of the academic year of the National University. Because of the lack of postgraduate offer across Colombia, it is possible that many sociologists, social workers, and anthropologists signed up to CINVA in search of postgraduate experience.

4 For Colombian architectural historian Carlos Niño, the collaboration with the ICT was the decisive reason to choose Colombia as CINVA's headquarters. The ICT, created by President Eduardo Santos in 1939, was a well-known national housing institute with a strong program in social housing.

5 Leonard J. Currie (CINVA's former director), Guillermo de Roux (Panama), Celestino Sanudo (Chile) Herbert Ritter, and Eduardo Mejia (Colombia), with the engineering support from Carlos Valencia and Jorge Arias de Greiff, landscape design by Currie, and A. Manrique e Hijos, Manuel J. Uribe C (Colombia) as building contractors.

6 Some of CINVA's building reviews can be found in PROA No. 75 (Bogotá: August 1953), *The Architectural Record* (London: March 1957).

7 For CINVA scholar Jorge Ramírez Nieto the "problem of housing science" resided in how to construct with the community—a community that is neither urban or rural, and how to innovate technologically through the integration of the labor and expertise of new migrant communities and interprofessional support.

8 Brackets are my addition. In Colombia there had been early attempts to maintain tradition such as the pamphlet for self-build from 1938 illustrates.

9 Brazilian architectural historian, Nilce Aravecchia Botas has written extensively on this subject matter.

10 In Spanish IAP, *Investigación Acción Participativa*. In English Participative Action Research (PAR), an "approach in social sciences, a process which emphasises dialogue, self-reflection, and a participatory approach to knowledge which rejects the neat hierarchical distinction between the researcher and researched with the explicit purpose of empowering the oppressed and helping them to overcome their oppression."

11 Provenance and students during CINVA's operational years are Argentina 133 students, Bolivia 68, Brazil 69, Chile 58, Colombia 321, Costa Rica 22, Cuba 5, Ecuador 66, El Salvador 38, Guatemala 8, Haiti 22, Honduras 27, México 47, Nicaragua 13, Panamá 16, Paraguay 24, Perú 73, Puerto Rico 19, República Dominicana 31, Uruguay 23, Venezuela 33, others 7 and no data found 36. Analysis of this data was undertaken by Jorge Alberto Rivera Perez.

12 See the work of Maria del Pilar Sánchez Beltran for the case of Colombia.

13 From the 17 modules offered throughout the years, the long-standing teaching modules were: *Curso Regular de Adiestramiento en vivienda* (1952–65), *Curso Regional de Vivienda Rural* (1958–1967, 1969-1970), *Curso de adiestramiento en autoconstruccion* (1962–64, 1966–70). The development of new modules changed in response to new teaching staff, projects, and geographies. Fondo CINVA, database, *Universidad Nacional de Colombia*.

14 Teaching staff included professionals from United States of America, United Kingdom, Chile, Argentina, Peru, Colombia, France, Haiti, Israel, Ecuador, Cuba, Guatemala, Denmark, Holland, Italy, Venezuela, and Australia amongst others. In an interview with Jorge Ramirez, he highlights the absence of teaching staff coming from the USA. Some were present initially, but later years were defined mostly by Latin American professionals. Visitors also included Richard Neutra, Marcel Breuer, Rino Levi amongst others. Analysis of this data was undertaken by Jorge Alberto Rivera Pérez.

15 A publication that followed Caroline F. Ware's work at CINVA.

16 Some of Ware's indications materialized as projects put forward to Bogotá's City Council by the Colombian architect Jorge Gaitan Cortes, then part of the city's council. This was also extended to different countries across Latin America. It was also applied within "slum clearance programs" and to low income or social housing projects. Social work, participation and "slum clearance" was also addressed by CINVA but mostly across Latin America but goes beyond the depth of this chapter. It is important to mention that there are some problematic aspects to this as well—one of which understanding the population of inhabitants as usually "rebels, without ambition, unhygienic" in the words of Josephina R. Albano, and the social work and housing projects made available only to "rehabilitated" inhabitants.

17 As detailed by the 1957 Manual: 1. Get to know reality and implications (environment, population, culture, resources, economies, and housing), 2. Formation of interprofessional teams, 3. Development of the community, where housing occupies a predominant position in relation to the totality, 4. Education of peasants (men, women and children) as extension agents, and professional levels (agronomists, architects, social workers, and rural teachers) 5. Pilot project to provide regional adjustment to the problem and to the actions needed to be developed, 6. Collaboration with local entities that will assure the continuity of the program, 7. Construction of the experimental house to determine betterment possibilities in the use of local materials and technicians, investment costs, rural housing design, and the development of manual skills needed for construction of housing between the students from Buga's *Escuela Normal Agricola* and CINVA's trainees. The materials used for this construction where funded and purchased with the sales of the *Escuela Nacional* Agricola's crops.

18 The conformation and consolidation of community structures would later be promoted and included within governmental programs in Colombia as tools for integral development and social and material rehabilitation, and later recommended to the governments of the countries part of CINVA.

19 Parenthesis is my addition. Chambimbal follows and builds from previous CINVA rural projects in Colombia such as Roldanillo and Anolaima (1954), Sogamoso (1955), San Jeronimo (1956), and Buga (1957).

20 These were 1. School, 2. Housing improvements and maintenance, 3. Absence of recreational spaces, 4. Latrines, 5. A bridge over Chambimbal's river, 6. Illiterate population, 7. Lack of attention from the local authorities, 8. Presence of insects within the housing units, 9. Need of a chapel, 10. Need of a representative of the local authorities, 11. Lack of union and cooperation in the neighborhood, 12. Water hygiene problems.

21 These changes are also evident in the manual of investigation and extension in rural housing (*Manual de Investigación y Extensión en Vivienda Rural*) from 1958 where Albano, Fals Borda, and Vautier place emphasis on the role of the researcher as a sociologist and with scientific approaches— observation and data collection whilst recognizing interpersonal relationships, the need of time to establish trust, the need for clarity in communicating the aim and scope of the campaign, the importance of an attitude characterized by comprehension of the rural people rather than as "doctors" who "are afraid of getting their hands dirty," but should instead have material agency to demonstrate, by practical means, how materials can be used.

22 The work of scholars such as Jorge Vicente Ramírez Nieto at the Colombian National University who has led the project of the CINVA archive, of PhD and Master's students at the National University such as Jorge Alberto Rivera Paez and Martha Liliana Peña Rodríguez, and more recently the work and collaboration of the Institute of Urban Studies at the Colombian National University with scholars from Latin America such as Alejandro Bonilla Castro from Costa Rica, Nilce Aravecchia from Brazil, Florencia Agustina Brizuela from Argentina, and Ana Patricia Montoya Pino have been studying CINVA in recent years has been fundamental for the consolidation of an integral and in-depth understanding of CINVA.

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Interview

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