AIDED SELF-HELP AND MUTUAL AID:
A NEW APPROACH TO LOW COST HOUSING IN PUERTO RICO

Luis Rivera Santos, Chairman
Puerto Rico Housing Research Board

Commonwealth of Puerto Rico
PUERTO RICO HOUSING RESEARCH BOARD
Río Piedras, Puerto Rico

January 1959
Puerto Rico Housing Research Board

Members

Ramón E. Bauzá
Telesforo Carrero
Juan Ortiz Altuna
Rafael Vincenty
Carlos Passalacqua
Juan Cabrera
Luis Rivera Santos, Chairman

Rafael Corrada, Director

1/ Act No. 88, approved June 22, 1957, authorizes the Governor to transfer the Puerto Rico Housing Research Board to the Urban Renewal and Housing Administration.
AIDED SELF-HELP AND MUTUAL AID:

A NEW APPROACH TO LOW COST HOUSING IN PUERTO RICO

Luis Rivera-Santos, 1/
Chairman, Puerto Rico Housing
Research Board

INTRODUCTION:

It has been frequently repeated that housing for the low income groups is in a state of crisis in most parts of the world. It is obvious that at the vantage point of the twentieth century civilization, there are too many millions of families in the rural areas who do not have access to public services and live under extremely poor sanitary conditions, in dilapidated huts, usually with earth floors and lacking the most elementary facilities. In the huge urban slums that defy our claims of achievement, there live, again too many other millions of families jammed in overcrowded houses located in the most unhealthy environment ever dreamed of. The home, which is intended to provide shelter and refuge from the ruthlessness of nature and as a resting place at the end of the day, turns into an unbearable burden for both body and soul of many fellowmen all over the world.

1/ Secretary of Agriculture and Commerce
Department of Agriculture and Commerce
The results, in terms of insecurity, social deterioration, frustration, annihilation of man's creative forces and of his vital impulses to tackle and master his own destiny through his own efforts, are so important for our civilization that they urgently deserve and command deeper understanding and worldwide consciousness. For our common good, and for the common good of the free world we all want to live in, it is most desirable that the state of indifference, which characterized the past generations, should be uprooted. The situation becomes even more challenging when we realize that the millions of humble, and to a large extent disfranchised families, are today, and will continue to be in the foreseeable future, the backbone and safeguard of our social order.

The social climate of this century is such that it is not enough to hope and wait. We can not continue to coast indifferently in the sight of such depressing circumstances. It is not advisable to rely on solution by "fiat" for such an important problem. Indifference towards the serious problems of the masses of the population endangers the rich cultural and political heritage of all of us. It is not sensible to take those risks. Fortunately, there are good signs indicating that the situation is not hopeless. In the
last years, numerous regional and international conferences and seminars have been held in order to discuss and look for a solution to the important housing problem of low income families. The literature on this subject is increasing in quantity and improving in quality. The legislation is ever increasingly profuse and of a greater social significance. The number of technicians and the citizens in general, who are truly interested in the problem, increase day after day. Some of the most qualified talent is today sincerely interested in housing and particularly in low cost housing. It is also fortunate that the areas where the need to provide adequate housing to low income families is recognized to be a public responsibility, are enlarged every day. It should be said that the sooner this principle of public responsibility is accepted, the better it will be for those directly affected, as well as for the whole of humanity.

Background

Conditions similar to those of other countries:

This work summarizes the experiences of the Commonwealth of Puerto Rico in improving housing conditions under a program of mutual aid and self-help, with the technical and economic cooperation of the government. We can say, that the housing
problem in Puerto Rico is, to a large extent, similar to that of any other country in process of economic development. Because our conditions resemble those in many other countries, we believe that our experience might be of interest to other areas. As in other parts of the world, our housing problem has its roots in the socio-economic structure of the area. Education, health, income levels, the value of land and the cost of its development, the cost of construction materials, the labor force and its availability, skills and wage levels, the level of technological development of the construction industry, the financing facilities, the attitudes and the social values, and the general state of economic development, are among the many factors which contribute to create the housing problem or to make more difficult its solution.

Of course, attack on these factors, to the point where it could definitely influence the improvement of housing conditions, is necessarily a long range proposition. We claim that providing adequate shelter to low income groups, is so urgent that governments and society in general should not wait for the permanent solution, or even the partial solution of the other important aspects of the problem. Some way must be found to
face and solve this problem without further delay. We strongly believe that in view of the vitality of the idea of mutual aid and self-help, perhaps it might not be inevitable to wait for those economic, technological and social developments in order to start tackling the problem in large scale, at least, for the lowest income groups, which are, by far, the most needy. This statement could, at first sight, seem paradoxical. It is not, as we will see later on.

The Population Problem:

In order that the Puerto Rican experiences may prove significant, and in order to make them understandable, it is necessary to establish, as a frame of reference, some of the prevailing conditions in the Island. Puerto Rico is one of the most densely populated countries. According to the last estimate for 1958, its population is about 2,310,700 inhabitants within an area of 3,430 square miles or a density of about 645 persons per square mile. Extensive movements of population from the rural areas to the urban areas create very serious problems in the cities which are unable to provide enough dwellings for the new comers. The birth rate, though it has been reduced from 38.5 in 1940 to 33.2 per thousand in
1958 is still exceedingly high. The death rate has been reduced from 18.4 in 1940 to 7 per 1,000 persons in 1958. A situation like this, in a country with an economy where agriculture is the most important source of employment, with very limited natural resources, brings about economic dislocations such as unemployment, low incomes, a low level of social services, growth of slums and a general housing shortage, that neither private enterprise, nor the State, have been able to correct satisfactorily.

The Urban Situation:

In spite of the progress achieved—about 25,000 public housing units have been built in the last 18 years—(See figure 1) it is estimated that 50 per cent of the urban population still lives in areas which could properly be classified as slums. These areas are characterized by overcrowding—very small lots, lack of order in the streets layout, lack of open areas such as squares and parks, uneven topography, steep and rugged land, soils with a high water level and unsatisfactory sanitary conditions, and in general, inadequate public services and

1/ In recent years, industrial development has been emphasized and continues to grow very rapidly, providing additional jobs.
Fig. 1

A public housing project built in Naguabo by the Puerto Rico Housing Authority. (Now Urban Renewal and Housing Corporation.) Families pay rent according to their income. Ownership is not contemplated in this type of public housing.
facilities. Furthermore, the size of the houses is too small to provide adequate shelter for the family, \( \text{1/} \) and the physical conditions are deplorable.

It is estimated that about 70 per cent of the houses in urban areas are either in need of heavy repairs or are so badly dilapidated that they should be replaced. In spite of the amazing progress made in the last 10 years, still 20 per cent of the urban families lack running water in their homes and about 19 per cent do not have electricity available.

The Situation in the Rural Zone:

In the rural zone it is estimated that 50 per cent of the families live in humble huts that need to be replaced. The most common type of rural house consists of three rooms, usually a small living room used also as a dining room, a bedroom and a kitchen. Two thirds of the rural families live in crowded conditions with more than two persons to a sleeping room. The largest number of houses have lumber floors and lumber walls. Others, the "bohío", which is rapidly disappearing, have straw walls and roof. Most of these houses are far from rainproof and offer little protection against

\( \text{1/} \) In Puerto Rico the average family is 5.6 persons.
tropical hurricanes. It has been stated that 61.4 per cent of all rural families live in houses only about 15' x 15' in dimension or smaller. Undoubtedly, most of these families live in houses unfit for human occupancy, by 1959 standards. Though great progress has been made during the last 10 years, still many families obtain water from springs, streams and rivers.

In terms of accessibility to highways, trading centers, schools and other services, a large proportion of the rural families, except those grouped in rural communities under Title V of the Land Law, are at a great disadvantage because of the scattered pattern of rural settlement. This is a great handicap for their improvement in relation to health habits, education, social contacts and interest in self improvement. It also creates serious difficulties to provide public services, such as electricity, drinking water, roads, schools, health centers and others, at a reasonable cost. At the present time, about 20 per cent of the families of the rural zone live as "squatters" in large farms in houses that belong to the landlord. Under the conditions of insecurity which go with squattering, there is no incentive to improve the houses. On the contrary, frustration and defeatism or
at least complacency, are characteristics of such circumstances. The program through which, in 15 years, 80 per cent of the squatters have been resettled in close settlements, will be discussed later.

The Land Law:

In order to concentrate our observations on the Puerto Rican experience in the improvement of housing through self-help and mutual aid, it will be necessary to refer mainly to the rural zones where the program has proved to be an effective means to solve this great problem. We will refer particularly to the Land Law and to one of the two organizations created by it: The Social Programs Administration of the Department of Agriculture and Commerce. Under the Social Programs Administration, mutual aid and self-help have also been successfully tried in the urban areas.

The Land Law of Puerto Rico, approved on April 12, 1941, has been the most consequential instrument in releasing farm workers from their obliterated status. It created, at the same time, the necessary conditions for the development of the program under discussion. Part of its history-making statement of motives, reads: "It is also an integral part of the moral purpose and the aim of dignity and economic freedom
embodied in the public policy of the Legislature, to furnish the means whereby the social class of "agregados" (squatters), or that is, of agricultural laborers, enslaved through the fact that they are not owners of even the lot where they have their homes, will disappear from Puerto Rico and to that end the Legislature states the fundamental human right of all human beings who live exclusively by the tilling of the soil, to be the owners of at least a piece of that land which they may use to erect thereon in the full enjoyment of the inviolability guaranteed by law for the homestead of the citizen, their own homes, thereby delivering them from coercion and leaving them free to sell their labor through fair and equitable bargaining".

The Land Law represents an effort on the part of the government to help low income rural families. Under the terms of the Act, land held by corporations in violation of the 500-acre Limitation Act (U. S. Congress Joint Resolution No. 23, approved May 1, 1900) is bought by the government through a government instrumentality: the Land Authority of Puerto Rico. 

\[1/\] Lands so acquired are used for the establishment of

\[1/\] At the present time, this limitation is included in the Constitution of the Commonwealth of Puerto Rico.
proportional profit farms in which the laborers share the profits. The land which is not adequate for these purposes, could be put into family type farms (Title VI). The program for the resettlement of squatters in Rural Communities (Title V of the Law) has used also some of this land, even though the program is mainly carried on through the purchase of private properties as determined by the Master Plan.

The Master Plan:
As a basis for the resettlement program, the Puerto Rico Planning Board carried out, with the cooperation of other agencies, the most intensive study of rural resettlement that we know of in any place. The section of the Master Plan for the Development of Puerto Rico, which covers rural resettlement, is certainly a most comprehensive piece of rural socio-economic planning. Such items as present and prospective sources of employment, land use, existing and planned rural schools, health services, rural electrification, water supplies, highways and many other services and facilities were carefully studied and evaluated before decisions were made as to the location of the new settlements.
The Social Programs Administration:

The Social Programs Administration of the Department of Agriculture and Commerce, created in the year 1948, is the government agency entrusted with the technical and administrative responsibility for the resettlement of squatters in close settlements or Rural Communities. Under this program, which is the one we are concerned with in the present story, after the proper site is selected for the new settlement, small plots varying in size from one fourth of an acre (1,000 square meters) to three acres, are allotted to landless farm workers. The plot is intended to provide a site for the home and enough land to keep some domestic animals, and for growing some food crops. The land is purchased, subdivided and ceded, free of charge, in perpetual usufruct to the families.

As of today, about 50,000 families have already been resettled in 287 Rural Communities, thereby remaking, in 15 years, the scattered pattern of rural settlement existing in Puerto Rico. The goal is to resettle a total 60 to 70 thousand families by 1962.

The new Rural Communities or villages so organized, run from 100 to 500 families each. They are designed following the most advanced principles in rural community planning. (See Figure 2). The design provides for the future establishment
LAY OUT OF RURAL COMMUNITY SAN JOSE, TOA ALTA, PUERTO RICO

LEGEND
1 CHURCH
2 SCHOOL
3 SCHOOL LUNCH ROOM
4 CONSUMERS COOPERATIVE
5 POLICE STATION (FUTURE)
6 BUSINESS AREA (FUTURE)
of such services and facilities as schools, health centers, parks, consumers' cooperatives, churches and others. The subdivision contemplates providing streets, water supply and electric service at low cost. In general, the new villages are intended to provide the socio-economic climate and the right physical setting for an overall improvement program at the lowest possible cost.

However, a good site, an adequate design and an extensive program of resettlement, regardless of how desirable they may be, are not the main objective of the program. These are necessary conditions, means, in the effort to achieve higher production and consumption levels. The program is one of Puerto Rico's strongholds in its all-out struggle for a higher standard of living for all our population. Governor Luis Muñoz Marín has called the overall program "Operation Bootstrap". To this end, the program is successfully enlisting the valuable contribution of the agricultural laborers.

The evaluation of what has been done in solving the housing problem, in the light of how much more ought to be achieved, and the magnitude and complexity of the problem, make us think that following the highly expensive, traditional methods, neither the State nor private enterprise alone, will be able to cope with the problem of providing adequate shelter
for the masses of the population in a reasonable period of time, which we consider to be a maximum of 10 to 15 years. This does not mean that we are underestimating the capacity of the State and private enterprise; we are only making an objective statement from the proved fact that the methods used until now have fallen short of the needs.

I would dare say that, if we make an estimate of the resources or the capital investment necessary to solve the housing problem in Puerto Rico, the figures would be of such magnitude -400 million dollars- that we could safely affirm that it will not be possible, within our economy and following the traditional methods, to face the shortage of houses, not even in an optimistic long range plan. Our observations indicate that this statement, which is valid in Puerto Rico, is probably basically valid in the great majority of the countries of the world. This is one of the reasons why the Puerto Rican experience in self-help and mutual aid housing may be of interest to other peoples in different areas.
Mutual Aid and Self-Help: 1/

A sense of realism makes us think that the effective betterment of the life of the rural population and of the masses of the urban population, will depend greatly upon the participation and effort of the families themselves. It is necessary to foster the organization of the community so that the families can work for their own improvement. They are called to be the masters of their own destiny. This is in itself a need due to economic conditions, and a desirable method, since it constitutes an effective training school for


Recently, the Social Programs Administration started exploring the possibilities of a new system which might also help to bring about the improvement of shelter conditions in Puerto Rico. A group of families living in a fairly scattered pattern of settlement has been organized with the idea of improving their houses. Those interested have been trained (two demonstrations) in the elementary skills of block making. A concrete block making machine has been provided by the government and installed in a shed provided by the families. They are responsible for its maintenance and repairs. The families are expected to make the blocks for their house under their own responsibility without supervision. Plans for the house and some training in construction will be provided later. Those interested can cooperate with each other and work in groups or they can make the blocks and later their home by themselves as individuals or as a family group. What we wish to find out is what are the results when a group of families is offered this minimum assistance to improve their shelter through their own efforts. A few more experiments of this type will be started in the near future. The first results are very promising.
democratic action, at a level where the usual methods of education do not seem to work satisfactorily.

Consistent with this basic philosophy, we are applying in Puerto Rico, in large scale, the secular methods of mutual aid and self-help. In spite of the universality of these principles, their application as an institutional approach to the problems of low income families has been rather unusual. After a variety of successful experiences in rural and urban housing, in organizing consumers' cooperatives, in providing drinking water at low cost and in other general physical improvements in Rural Communities and in urban areas, we are wondering if we are not, for the first time, on the track to a practical system for the solution of the many social and economic problems with which humanity has coped for generations without any visible sign of success.

Isolated examples of mutual aid and self-help could be found in all parts of the world. But it is the planned, the purposeful organization of the community for direct action, what gives special significance to the Community Action Plan sponsored by the Social Programs Administration of the Department of Agriculture and Commerce.

The housing program is the spearhead of the plan in an area where most difficulties are likely to be found. When
operating with rural farm laborers in a housing program, like the one in progress in Puerto Rico, there are many and difficult problems: training in needed skills (though not as important as one might think); human relations; sources of construction materials; transportation; low cost supervision; unity of action in the group, since the work is hard and takes a long time; timing of work, so that the family can earn a living at the same time that the project is in progress, and, above all, the economic problem, for regardless of how low a cost of $350 for a concrete block or a reinforced concrete house may be, it is a very, very large sum for the great majority of the farm workers.

The program was started in 1949 on an experimental basis as a method of discovering and developing techniques for efficient and effective group action. The experimental stage is now over. As of today, more than 5,000 units have been built in more than 100 Rural Communities and urban areas (See Table I). About 2,000 units are under construction in both rural and urban areas. The experimental stage and the large scale program have produced a series of useful principles of permanent value, which we feel are of general application.

In the projects developed until 1952 the houses were built of blocks with reinforced concrete columns. The
TABLE I

AIRED SELF-HELP AND MUTUAL AID HOUSING PROGRAM

Number of Units Built from 1950-51 to 1958-59.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>12</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>1951-52</td>
<td>65</td>
<td>-</td>
<td>65</td>
</tr>
<tr>
<td>1952-53</td>
<td>181</td>
<td>-</td>
<td>181</td>
</tr>
<tr>
<td>1953-54</td>
<td>157</td>
<td>-</td>
<td>157</td>
</tr>
<tr>
<td>1954-55</td>
<td>546</td>
<td>-</td>
<td>546</td>
</tr>
<tr>
<td>1955-56</td>
<td>1004</td>
<td>10</td>
<td>1014</td>
</tr>
<tr>
<td>1956-57</td>
<td>1608</td>
<td>132</td>
<td>1790</td>
</tr>
<tr>
<td>1957-58</td>
<td>1398</td>
<td>141</td>
<td>1539</td>
</tr>
<tr>
<td>1958-59 (As of Nov. 30, 1958)</td>
<td>306</td>
<td>75</td>
<td>381</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>5267</strong></td>
<td><strong>418</strong></td>
<td><strong>5685</strong></td>
</tr>
</tbody>
</table>

1/ Concrete blocks and reinforced concrete.
2/ In addition, 72 emergency frame units were built in the urban area.
3/ In addition, 683 emergency frame units were built in the urban area.
4/ In addition, 80 emergency frame units were built in the urban area.
5/ Some of the urban houses are of the rural type. (18' x 18'). Others are 20' x 30' and include 3 bedrooms, living room, dining room, kitchen, bathroom and porch.
construction techniques in this case require a minimum of 15 families in each group. Later development construction methods make it possible to organize larger groups -over 100 families in a single project. The families are selected for the project after they have been properly oriented in at least four meetings for study and discussion. The purpose of these meetings is to help them understand the program and to develop the attitudes and a favorable climate for the hard task of building the house. All phases of the program are covered in these meetings: factors to be considered in the selection of the community and the family, technical aspects of construction, group responsibility, responsibility towards each other, reports to be submitted, repayment plan, system of supervision, care of the equipment, protection of materials, house maintenance, regulations of the housing project. After these meetings have been held, the group for the housing program is selected. We wish to emphasize that the selection of participants is always important, but in the experimental projects, when there is no previous experience, this selection could be the determining factor in the success or failure, not only of the project, but of the idea itself. In Puerto Rico all projects started have been successfully completed.
In the last meeting, before construction work is started, the families are organized in smaller groups or "working groups". The purpose is to have at least three men working daily in the project for every 15 participants. The whole group of 15 members is expected to work either on Saturday or Sunday in the project.

Our experience points out clearly that the development of a proper attitude is the most reliable basis for the continuous effort necessary in a housing project. It is for this reason that the process of orientation is so important before construction begins. Orientation should be continued during the construction period although with less intensity.

The Concrete Block and Reinforced Column House:

The first step in actual construction consists in building a shed where the very simple and easily operated concrete block making machine -$250 cost- (See figures 3 and 4) is installed and where cement and some other construction materials are stored. Next, the heads of the families themselves start to build the concrete blocks. At this stage, government supervision is at a minimum. No house is started till all the blocks necessary for the project are built. After sites for all houses are selected, the reinforced concrete foundations
Fig. 3

Governor Luis Muñoz Marín visits Rural Community San José in Toa Baja and takes his turn in making concrete blocks.
After receiving simple instructions, two members of the group make blocks in the easily operated concrete block-making machine provided by the Government.

A gasoline operated concrete mixer (capacity 100 pounds of cement) is used when pouring the reinforced concrete columns and roof slab.
are built. A concrete mixer -$500 cost- (See figure 5) is used at this stage and also when the reinforced concrete slab is being poured.

The government, through the Social Programs Administration, provides the technical assistance and a loan of approximately $350 per unit for construction materials, charges for the use of equipment, machinery and payment of the construction foreman. (The only paid person in the project). In order to secure lower costs, the government buys all the construction materials. The families working in groups, provide, free of cost, all the labor required. Besides, they supply the windows and doors, generally obtained from salvage material of their little house, or they buy the materials from their own resources.

The houses under construction consist of two bedrooms, 8'6" x 8'6"; one living-dining room, 10' x 8'6"; a kitchen, 8'6" x 4' and a porch, 8'6" x 6'. (See figure 6). The whole structure is made up of cement blocks with reinforced concrete columns and reinforced concrete roof slab. (See figures 7 and 8). A separate aluminum privy with concrete foundations is provided by the Department of Health. The families can expand the house later as they wish.
RURAL HOUSE FLOOR PLAN

BEDROOM 8'6" x 8'6"

LIVING-DINING ROOM 8'6" x 10'10"

KITCHEN 4'10" x 5'6"

PORCH 4' x 14'4"

AREA: 324 SQ. FT.

SCALE 3/16" = 1'-0"

FIG. 6
Fig. 7

Concrete-block house under construction.

Fig. 8

Until 1952 all the houses were built of concrete blocks with reinforced floors, roof and columns. During the last 6 years the same house has been built with reinforced concrete walls. In this case, a set of forms is used for the foundations; another set of forms for the walls, and another for the roof. Through this system, groups of up to over 100 families have been organized and the construction period has been considerably reduced (8 months). The goal is to reduce construction period to 6 months regardless of the number of units in the project. The system works very well in mass construction. For experimental or pilot projects we recommend starting with concrete blocks. The reinforced concrete columns might not be absolutely necessary.

As stated before, the government provides the necessary funds which amount to about $350. The families pay back the loan in 10 years without interest charges.

In our experience it is very important to establish a relatively short term for the payment of loans, as compared with the usual policies in higher income families. It can not be expected that families who are not used to borrow money on a long term basis will be able to understand well the meaning of a 20-year term loan in order to own their home. Moreover,
we must take into consideration the sense of insecurity so deeply rooted in low income families. Twenty years or 30 years is too remote a future to be understood by them. This, however, does not mean that a repayment plan should be so short as to affect food, clothing and health needs.

The Minimum Service Urbanizations:

The program to establish Minimum Service Urbanizations was started in 1954 in an effort to freeze the growth of slums, by providing lots free of charge to the families that normally migrate from the rural areas to the urban areas and for families that are squatting lands adjacent to the cities. They are intended to take care also of the natural increase in the population of slums. In Puerto Rico we have found that, following the traditional methods in government and private enterprise, slums have not been reduced to a significant degree and in many places they continue to grow at a rapid rate.

Through this new approach, lots are distributed in the urban areas. Only minimum services and facilities are provided to this subdivisions. The subdivision plan follows the same high standards of any other subdivision but only

*Authorized by Joint Resolution No. 104, approved July 1, 1953.*
such services as water supply and electricity are provided in the first stage. The levelling of streets is also carried out before assigning the lots to the families. The general improvement of the community is started after the families are resettled. The Municipal Governments, the State Government and the families themselves, cooperate very closely in this stage of the program.

Under this program, over 4,000 lots have been distributed in 20 towns. The families receive the lots free of charge in perpetuity.

It seems to us that where economic resources are scarce, as they are in Puerto Rico, this program might be a very timely approach to check the growth of slums and even to move families out of existing slums at very reasonable cost to the State. Though it is realized that a Minimum Service Urbanization is not the ideal, it is so far above the conditions prevailing in the slums that we consider it a most desirable step in housing improvement. In some cases, it might be the only alternative to face the problem of slums, in large scale and without delay.

Once the family owns a lot, it is very much easier to improve the house. In these minimum service subdivisions, aided self-help housing projects have been successfully
completed. (See figures 9 and 10). In the Metropolitan Area of San Juan, the house built (20' x 30') has 3 bedrooms, a living room-dining room, bathroom, kitchen and porch. (See figure 11). Its cost in terms of construction materials, charges for transportation, use of equipment and supervision, is about $1,500.

In smaller towns, the same design of the rural house has been used.

CONCLUSIONS:

Our experience with low income families of the urban areas in projects like these, has proved that, if adequate techniques and methods in group organization are used, the cooperation and interest of the families can be aroused and maintained to the completion of a housing project, and beyond, to continue improving the community. Our experience indicates also that the same basic principles of self-help and mutual aid are valid in rural and urban areas, as well as in large cities and small towns, whether the participants are farm laborers or industrial workers. Even though the efficiency is necessary low, construction techniques are easy enough to allow for a rapid development of the simple skills that are necessary to successfully complete the projects.
Fig. 9

Aided self-help and mutual aid housing project under construction in a small town.
Fig. 10

Typical urban house (20' x 30') built in the metropolitan area of San Juan through self-help and mutual aid. This project consisted of 35 units.
URBAN HOUSE FLOOR PLAN

AREA: 600 SQ. FT.
SCALE 3/16" = 1'-0"
Fig. 11
The results of the program we have just described are very promising. They confirm the inherent capacity in the common man to struggle for his own betterment through group action, provided the right orientation is made available to him. We hold that there is great vitality in the principles and in the idea of mutual aid and self-help. We sincerely hope that our successful experiences will invite other countries to explore its possibilities as an institutionalized approach not only in the field of housing, but also in providing other services and facilities so dearly needed by many millions of families all over the world.

January 1959.
ORDEN EJECUTIVA

TRANSFIRIENDO A LA ADMINISTRACIÓN DE RENOVACIÓN URBANA Y VIVIENDA LOS DEBERES Y FACULTADES DE LA JUNTA DE INVESTIGACIONES SOBRE VIVIENDAS DE PUERTO RICO.

El Gobernador Interino de Puerto Rico, en virtud de las facultades y poderes conferidosle por la Ley Número 88 de 22 de junio de 1957, según enmendada por la 109 de 26 de junio de 1958:

Por la presente transfiere a la Administración de Renovación Urbana y Vivienda los deberes y facultades conferidos, de acuerdo con legislación anterior, a la Junta de Investigaciones sobre Viviendas de Puerto Rico. Se transfieren, además, todas las propiedades muebles e inmuebles, personal, archivos, contratos, convenios, obligaciones y todos los haberes o capital activo de cualquier clase, naturaleza o descripción pertenecientes o inherentes a la Junta de Investigaciones sobre Viviendas de Puerto Rico.

Esta Orden entrará en vigor el día 1ro. de febrero de 1959.

EN TESTIMONIO DE LO CUAL, firmo la presente y hago estampar en ella el Gran Sello del Estado Libre Asociado de Puerto Rico, en la ciudad de San Juan, hoy día 20 de enero, A. D. 1959.

ROBERTO SANCHEZ VILELLA
Gobernador Interino

Promulgada de acuerdo con la Ley, hoy día 20 de enero de 1959.

N. ALMIROTY
Secretario Auxiliar de Estado