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DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT
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SPECIAL REPORT ON TECHNIQUES OF AIDED SELF-HELP HOUSING

... some examples of U.S. and overseas experience

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
OFFICE OF INTERNATIONAL AFFAIRS

PREFACE

The author, Ervan Bueneman, has been involved in housing, community development, and urban planning since 1949.

He has worked overseas in a variety of aided self-help housing and urban development assignments for the Agency for International Development and its predecessor agencies, the United Nations and various European and multinational housing development agencies.

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The Office of International Affairs, Department of Housing and Urban Development, presents this summary of some foreign and U.S. experience in the field of self-help housing techniques in the interests of the dissemination of information on a subject of current interest. The material presented does not necessarily represent the views of the Department, nor does it imply an endorsement of the policies of other nations.

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INTRODUCTION

For approximately fifteen years following World War II, overseas organized aided self-help housing programs received strong support from various U.S. and multinational development assistance organizations. Staggering housing problems faced countries devastated by the war. The developing regions of the world required capital far in excess of available internal and external resources. Organized aided self-help housing programs were considered a way by which many families could obtain decent housing through their own efforts at a relatively small capital expenditure.

In some developing countries, helping families build their own homes became the basis of national housing policy long after the departure of the experts who first introduced and developed the concept. Other developing countries are attempting to cope with rapid urbanization and its accompanying problems, not the least of which are squatter settlements. Methods and techniques developed in many years of experience with aided self-help housing programs are being adapted for use in site and services schemes and core house programs, or combinations of these approaches to the squatter problem.

There are certain positive aspects of aided self-help housing which should be borne in mind by anyone interested in or concerned with this approach to housing development:

- A person who has built his own home has a stake in and an appreciation for that home. An individual's involvement in the construction process results in a feeling of responsibility for his home; a responsibility which can preclude the development of management problems after occupancy.

- From the point of view of both the sponsor and the participant, aided self-help housing programs require a tremendous amount of patience and perseverance.

- Aided self-help is an approach which must be tailored to the problems and way of life of the people who will, in the final analysis, determine the success or failure of the program -- the participants.

THE GERMAN EXPERIENCE

Organized aided self-help housing in the Federal Republic of Germany has gone full circle since World War II. Self-help housing programs contributed significantly to the reconstruction of many German towns and cities, but were phased out as Germany recovered from the war. Building costs advanced more than 30 percent during the first half of 1970. Interest rates rose, land costs skyrocketed, and the building industry faced severe labor shortages. It is extremely difficult to provide housing for many German families at prices they can afford. More and more young German families are forced to work weekends and evenings, sometimes over a two or three-year period, building themselves a decent home. Organized aided self-help housing programs are again under consideration.

Although aid in terms of organization, equipment, technical guidance, and financing is not presently available as it was after the war, another avenue is open. Some municipal governments have programs where below-market-value lots are made available to families interested in building their own houses. A family has to build on this lot within a five-year period. If this requirement is not met, the family must sell the lot back to the government and incur a penalty.

A Case History

Unless you have actually built a house in your "leisure" hours with your own hands, it is difficult to appreciate the effort, perseverance, and endurance required to see the project through.

The case history of this typical German post-World War II project was written by its director, Architect Helmut Bruchmann. It is unique because Mr. Bruchmann and his family were also participants in the project. In order to comprehend the family effort which characterized German aided self-help housing projects, it is worthwhile to note that Mr. Bruchmann's wife and small children began their work on the project each day with other families at 4:00 in the morning. The children worked with their parents until it was time for school. The wives usually worked during the day while the men were at their jobs. After school and after work, the families worked together until ten or eleven in the evening.

Mr. Bruchmann's description of the project follows:

After World War II the most important thing was to repair or rebuild people's housing. The situation was chaotic because millions of people were coming out of what is now East Germany and those portions of Germany which are now part of Russia and Poland. In spite of the large numbers of refugees which entered West Germany between May 1945 and 1948, few new homes were built. These years were used almost exclusively to rebuild, even on a temporary basis, the buildings that were partly destroyed.

Homeowners were forced to repair their houses mostly by themselves using old building materials. Bricks and stones were reclaimed, cleaned and used again for walls. Span roofs were converted to flat roofs and partly covered with sheet metal instead of roof tiles. Windows were

nailed shut with boards. Basements were cleaned so that families would have a place to live until new houses could be built.

Only after this difficult period could thought be given to building new but small buildings. But there were problems In addition to housing, food was needed for all the people, especially in the cities and larger villages. Government policy was to encourage people to grow their own food. Many families were given a plot of about 300 square meters (although when the first houses were projected, it was planned to have lots approximately 1,000 square meters).

Families were encouraged to plant as many fast-growing fruit trees as they could, and to grow as many vegetables as possible in garden plots. This was the basic concept applied in almost all parts of Germany, but in particular in the British and American sectors. Thus, self-help techniques were applied to food production as well as the reconstruction of the housing supply.

Building materials for reconstruction were those most easily obtained in the immediate area. In a number of areas, even for entire settlements, the principal building material was clay. Clay loam, with the addition of binding agents (hay, straw, or animal hair) was placed in molds and compressed directly into bricks.

It was not always possible to find suitable loam at every project location, and other materials were needed. The broken stones, bricks, and concrete from buildings in the cities and towns leveled by bombs were used. Clearing out rubble from the bombed-out cities was accomplished in a systematic way, from the outside toward the inside to create roads to the interiors of the cities. The rubble was piled up on the outskirts and sorted out there by the women and children.

Large mills or crushers were constructed near the mountains of rubble. These crushers, which ground the rubble into gravel-sized aggregate, were operated by women. The crushed material or aggregate was mixed with air-entrained cement. Excellent brick-size components of concrete-like material were provided by this process. These bricks had superior insulating qualities because the aggregate had irregular shapes which provided for larger air spaces and a lower density.

On other occasions, this reclaimed aggregate was mixed with air-entrained cement and poured into steel frame forms. The walls were cast in one piece without expansion joints, a process also used for the load-carrying, inside partitions. To assure continuous operation, two mold assemblies were used alternatively. The mold assemblies were placed on top of the concrete ceiling of the basement, which had been poured in conventional wooden forms. The forms were also used for the ceiling of the ground floor. The gable ends and non-load carrying partitions were made from cinder blocks. The rafters and finishing on the inside were done in the conventional manner.

The most important question, however, was: How to build a new home without any money, without any down payment? All that was available was "man power." This included "wife and children power," or "family power."

Salaries and wages were low. For example, a mason's salary was approximately 50 cents per hour. Families also had to replace, when they could, many of the simple household items they had lost during the war.

The government helped. Some families did get some money from reparation claims for damage or loss of property during the war. For the most part, however, financing was obtained through government loans, and these loans were based on the willingness of each member of the family to work. Money enough was provided to buy all of the building materials, and to pay for some specialized assistance, but by and large, the house builder and his family did their job as best they could.

Mr. Bruchmann prepared the working drawings, and served as director and inspector. Other specialists were: a mason, plasterer, carpenter, plumber, electrician, etc. These persons worked with the families and on the houses when needed. The scheduling of work and the ordering of materials was the job of the architect/director.

And so they worked together: 16 men and 16 women on 16 houses, with the help of those children who were strong enough. Basements and footings were excavated by having the women and the strongest children load the wheel barrows which the men pushed to the outside. The women and children put the clay loam material into wheel barrows, mixed the concrete and the plaster, and handled the lumber. The women also loaded the concrete mixers with sand, gravel, cement, and water, and the men pushed the loaded wheel barrows. Grandparents operated the elevators which transported these materials. All of the family members transported the molds, erected the scaffolds, carted the stones, unloaded building materials, insulated basement walls, cleaned the machines, slaked the lime, etc. They did this going from one point to the other, until, by working together, they had erected all the houses.

The families did their work with one or two professionals working with them until the houses were ready. It took more than a year.

THE PUERTO RICAN MODEL

To a large extent, most of the overseas organized aided self-help housing programs developed or supported by U.S. foreign aid organizations have been either modeled after or inspired by the Puerto Rican experience.

Organized aided self-help housing, as an approach to the desperate housing problem of Puerto Rican families, was developed on the basis of the Rural Resettlement Program authorized under Title V of the Land Law of 1941. More than 37,000 rural families have helped build their own homes since the program was introduced in 1949.

The reason for its success is that it has been an important component of Puerto Rican policy, and has received the full support of each Puerto Rican Governor and his administration. For this reason, it has been able to attract an outstanding and dedicated staff during its many years of operation. This combination is essential to the success of organized aided self-help housing programs.

Implementation

The specific areas of program implementation and operation which can make the difference between success or failure more than any other phase are:

- Preparation of participants.
- Formation of working groups.
- Maintenance of the morale and productivity of the participants and working groups.

The causes for the failure of most organized aided self-help programs are:

- Inadequate preparation.
- Failure to organize participants into effective and cohesive working groups.
- Inability to maintain morale and keep participants on the job.

If priority is not given these tasks, which include definition of the participating families' responsibilities after completion, the program is certain to have problems, not only throughout construction but after the houses are occupied. The skilled staff needed to train and organize participants and to maintain their interest over long periods of time is difficult to find.

The Social Orientation Staff

The social orientation staff, as it was called in 1957, consisted of people with extensive experience in working with the type of families participating in the program. They were from areas such as social

welfare, teaching, and rural sociology All had successful experience in the fields of community organization, education, welfare, and group dynamics with both rural and urban Puerto Rican families. The social orientation staff was under the general direction of the Chief of the Housing Division of the Social Programs Administration so that there would be close ties between the staff and the administrators of the program. The latter were responsible for developing policies responsive to the problems, needs, and aspirations of the participants. The staff, in consultation with the head of the social orientation section, was involved in the following facets of the program:

- Selection of communities and participants.
- Preparation of the participants for the program.
- Acquainting the community within which the project was located with the purpose and aims of the program.
- Planning and programming.
- Coordination with the construction staff.
- Coordination with other governmental agencies.

Selection of Communities

A committee composed of officials of the sponsoring organizations studied all communities that might qualify, and determined those which could be selected. The following requisites were considered:

- Inadequate housing.
- Availability of interested families willing to provide the necessary labor.
- Adequate roads for transportation of building material.
- Proximity to sources of construction material such as stone, sand, and gravel.
- Some form of potable water supply.
- Families with a positive attitude toward cooperative and group action.
- An active community council.
- Completed community improvement projects accomplished through self-help, e.g., road construction, community centers, etc.
- Willingness to provide supporting services to the project.

Orientation Meetings

One of the most effective tools in preparing the participants and the community were orientation meetings. Three carefully planned, regularly scheduled orientation meetings followed an initial exploratory meeting. All meetings were open to the public.

The exploratory meetings enlisted candidates for the program. Models, films, and various audio-visual aids were used to explain the program, requirements for participation, and the participants' responsibilities. Following the meeting, a list of interested people, who considered themselves qualified, was prepared.

Selection Criteria

Approximately a week after the exploratory meeting, the first of the "orientation meetings" was held. Attendance at these meetings was a prerequisite for acceptance into the program. At the initial meeting, the first item of business was the organization of a Mutual Savings Society to help the group save for the initial down payment and an accident insurance premium. The down payment was intended to separate the serious applicant from the less dedicated. The Mutual Savings Society was organized with the assistance of the social orientation staff and administered by the group with the social orientation staff acting only in an advisory capacity. Members who were not saving regularly were often successfully urged to do so by their peers. The group could not begin construction until at least thirty of the forty families participating had accumulated the full down payment.

The second item of business was the election of a president, secretary, and treasurer. The Mutual Savings Society was the treasurer's responsibility. Following the election, the social investigation survey was explained in detail.

The social investigation was conducted by former social workers. Success in this phase was largely dependent upon the careful gathering and analysis of all relevant information that would give the social orientation staff sufficient insight to work effectively with the families. Also, a careful investigation was conducted to determine eligibility. Each family was visited at home and a written report prepared. The report contained information about the family's present living conditions, economic resources, size, attitudes toward the program, and toward improving their living conditions, as well as other data necessary for the proper study of each case.

Criteria for Community Selection

When funds are limited and priorities have to be established, some criteria for community selection are necessary. A second orientation meeting explained why the community was selected. By being completely open about the basis for selection, neighboring communities will for the most part support the program. The factors considered in Puerto Rico were:

- Active participation of families in community betterment activities.

- General attitude of the community in improving its own living standard by helping itself and others.

- Existence and support of cooperative enterprises.

- Attitudes toward community improvement and beautification.

Qualifications and Selection of Participants

A third orientation meeting focused on the qualifications and selection of participants. To qualify, a candidate had to satisfy the following requirements:

- Be the head of the family.

- Live with his wife and family on a lot covered by Title V of the Land Act.

- Have a house in bad condition.

- Have cooperative ideals and a record of cooperating with his neighbors in community improvement.

- Be honorable and have a reputation as a good worker.

- Be of good conduct.

- Be physically and mentally healthy and be able to do the work required.

- Have a desire to learn.

- Have the desire to improve his family's living standard through his own efforts.

- Have the ability to meet the monthly payments.

- Be an active participant in community improvement activities.

- Be a man to be trusted on his word (this is necessary because in the construction stage he is not bound by written contract).

- Agree to tear down the present house when the new house is livable and to construct as many of the doors and windows as possible with the reuseable material (this was to prevent attempts to have two houses on a lot).

- Agree to work on the days stipulated until the completion of the project.

- Abide by the rules accepted by the group.

Subjective rules, as in the case of some prerequisites for choosing communities and selecting participants, require a keen sense of judgment

and insight into each family's situation. Most of these regulations and prerequisites were applied with flexibility, and were sometimes altered to suit certain situations. However, in each case where a regulation was altered, there was group approval.

As a final item of business, before the close of the last orientation meeting, work days were assigned to the head of each family. A participant was required to work one full day during the week and one full day during the weekend. He was not permitted to send substitutes.

Construction Phase

Every effort was made to put the groups to work on their project within the shortest possible time. A substantial time lag between orientation and construction can take the edge off the readiness for work. Because the social orientation staff developed a relationship with the participants during the orientation period, the same staff members worked with the groups during construction.

A working group consisted of not less than 30 households. The actual construction of the houses within a project was the responsibility of the foreman, but the job of getting the participants to work and keeping them at work was the job of the social orientation staff member who trained and organized the group. Group dynamics were employed, and the staff was successful in getting the group to bring the necessary pressure to bear upon the slackers who were not reporting as scheduled or not working on the job.

In the rural projects, each house was built on the participant's lot. Where this form or pattern was followed, it was considered necessary for work on all houses to progress at the same rate. If one or two houses were completed before the rest, there was always the possibility that the men who held title to those lots would abandon the group and work only on their own houses.

In some rural projects, where lot titles did not pass until all houses were completed, house selection was done by drawing lots. In projects following that pattern, work could proceed on those houses which were most suited to the construction schedule.

In one urban project, participants with the highest number of working hours contributed to the project could draw three houses and select one from those three; men who had worked the next highest number of hours could draw two and select one; and those with the least number of hours had to take what was left. This system offered an incentive to those who contributed the most hours.

A Continuing Role

Working out arrangements for lot and house selection, planning and organizing the parties and celebrations scheduled throughout the construction phase to maintain morale were, among other tasks, the job of the social orientation staff member who collaborated closely with the foreman.

Organization of the construction site, scheduling of materials and equipment for delivery were managed with an exceptional degree of planning and coordination. Although it would be difficult to immediately achieve the level of construction management that has evolved in a small geographical area like Puerto Rico, it is a necessary standard to strive for if an organized aided self-help housing program is to be successful. Participants are very impatient about delays in arrival of materials and equipment. Unlike paid labor, who are often happy to sit idle while waiting for necessary materials and equipment, participants soon vanish and are often reluctant to come back to work. If a pattern of delay in material delivery continues, participants will sometimes quit. Finding and training replacements is an expensive and time-consuming administrative problem. It can be kept to a minimum if the social orientation staff and the construction foremen operate as effectively as they did in Puerto Rico.

SELECTED OVERSEAS EXPERIENCE

The following programs have been chosen because they are examples of the type of national policy position, sponsoring agency organization, and project implementation approaches applicable to organized aided self-help housing programs devised for U.S. problem areas.

Eastern Caribbean

Trinidad/Tobago

Trinidad was the first to apply the Puerto Rican aided self-help experience. In the early 1950's, U.S. housing experts attached to an organization sponsored by the governments of the United Kingdom, France, The Netherlands, and the United States introduced the concept to the insular or local governments of Antigua, Barbados, British Guiana, British Honduras, Surinam, and Trinidad.

In the case of Trinidad, it was not until 1956, when the present Prime Minister was elected on a platform of aided self-help housing, that this approach was incorporated as a key component on that country's housing program. With strong support from the new Prime Minister, more than 2,000 units were constructed. The Trinidadians used a modified approach, based on the Puerto Rican experience, known as the self-help/hired-help method. It had advantages in the form of house production and smaller demands for on-site housing agency staff.

Under this method, most of the skilled work is performed, usually under contract, by hired labor. The family undertakes those operations requiring little skill. They also serve as helpers to the skilled workers. The government provides the land and services, schedules and orders the building material, warehouses the material and equipment on the site, and finances the houses through appropriated funds. Government staffs are responsible for construction as well as the orientation and motivation of the families. The self-help/hired-help method was employed primarily in the urban and suburban areas of Trinidad.

A much more intensive use of self-help and family labor was employed on the island of Tobago. The island was quite isolated, especially in 1958, from Port of Spain and the headquarters of the housing agency. The Tobago program was devised so that it could operate with a minimum of direction from the central office of the housing agency.

Each participant was allocated a lot at the beginning of the project, and the lot was leased to him at the completion of the project. Each participant worked on his own house following a schedule adaptable to his working commitments. The schedule included enough working hours to insure completion within a reasonable period of time. Participants worked together cooperatively only on those phases of construction which required group effort.

Strong government support for aided self-help housing in Trinidad and Tobago accounted for its high degree of success, which exceeded that in other areas of the Caribbean. The government also tailored application

of self-help to the conditions and the problems of the people it was intended to serve.

In the 1960's, large amounts of external capital assistance placed emphasis upon publicly-constructed housing for low-income families, and government-insured, privately financed housing for middle-income families. Emphasis on self-help housing faded. By the 1970's, social tensions increased among lower income families. There was insufficient capital for low-income housing, and a significant increase in management problems within the public housing projects. These developments influenced Trinidad and Tobago to focus once again on organized aided self-help housing for low-income groups.

Central America

Guatemala

In 1957, a team of U.S. housing advisers was assigned to Guatemala to develop a nationwide aided self-help housing program. The intent was to relieve the political and social tensions in the country at the time. Approximately 3,000 houses were built through self-help with financial and technical assistance from the U.S. and matching funds from the Government of Guatemala. An additional 1,000 units were completed solely with Guatemalan Government funds.

The initial team of advisors was well-balanced in terms of training and experience. One member had had many years of experience in Puerto Rico and the Caribbean in training and orienting families participating in community development projects. Another member had been a successful contractor/builder in the U.S., and contributed to planning the efficient organization of the building site. The senior team member was an architect/planner with experience in the organization of self-help housing programs in post-World War II Germany and the Middle East.

This interdisciplinary team collaborated in the formulation of a well-planned organized aided self-help program for Guatemala, including:

- An extensive orientation program patterned after the Puerto Rican experience.
- Use of a pre-fabricated construction system tailored to local practices and designed to use indigenous building materials.
- Availability of adequate financing mechanisms to enable participants to carry the costs of building materials and wells on a self-sustaining basis.

Four thousand units were planned for construction. However, these plans did not materialize despite the thorough work of the team of experts. Administrative and financial difficulties were given as factors contributing to the failure. To a large extent, policy changes led to the demise of the program. By 1962, the American housing advisers had phased out, and by 1963, the Guatemalan housing organization was no longer connected with the program. But, the availability of large amounts of

external capital assistance in Guatemala was, as in the cases of many other countries, instrumental in influencing the government to pursue an "easier" approach to the housing problem. The Government of Guatemala was assured in 1962 of a large loan to finance low-cost housing built by the housing agency.

East Africa

Tanzania

Tanzania was one of four countries in East Africa that received extensive technical assistance from the U.S. in the field of organized aided self-help during the early sixties: Kenya, Northern Rhodesia (now Zambia), Southern Rhodesia (now Rhodesia), and Tanganyika (now Tanzania). A number of reports and studies describing various segments of this experience have been published. One of the Rhodesian projects is described in HUD Ideas and Methods Exchange Publication No. 18* and both the Rhodesian and Zambian experiences are covered in Ideas and Methods Exchange No. 65.*

In retrospect, the most significant aspect is that U.S. technicians were able to convince East African policy makers, through a series of well-conceived pilot demonstration projects, that the African tribal traditions of self-help or "self-reliance," and working together toward mutual goals, were valuable resources which should be incorporated as bases of social and economic development programs.

This accomplishment was clearly evident to the multinational International Cooperative Housing Development Association (ICHDA) team, when the team visited East Africa in 1969 for the purpose of developing, in collaboration with the United Nations Economic Commission for Africa, a regional pilot program for low income settlement. The philosophy of self-help or "self-reliance," as it is called in Tanzania, has made the U.S. way of life a model for the developing world. Tanzania is one of many countries which structured its economic and social development programs upon a policy of self-help as advanced by the U.S. in its early aid programs.

Experience has also demonstrated the necessity of a cohesive structure within the private sector, which in many nations including Germany has contributed substantially to the planning and implementation of successful self-help programs. Such a structure would link cooperative and nonprofit housing sponsors on a continuing basis. It could also serve as a liaison between its components and various government organizations and agencies. The enormous technical and financial resources of the nonprofit private sector will be fully and effectively brought to bear on finding appropriate housing solutions for all only when all members of the sector coordinate their activities and goals and the government actively supports their efforts.

Extensive overseas experience over a twenty-five year period in aided self-help has conclusively shown that the approach to housing and

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* See Bibliography.

community improvement cannot work unless there is a clear cut, strong national policy advocating self-help as a means by which motivated families, desiring the best within their resources, can achieve the highest possible housing standard.

Intensive use of self-help, or family labor, may not be practical for every family situation, or problem area. It has been learned that some degree of family participation, if nothing more than a modification of the Puerto Rican family orientation program, is essential to a family's adjustment to their new home and community responsibilities.

The Government of the United Republic of Tanzania's National Housing Policy follows:

1. Achieving a successful housing program involves undertaking a number of tasks, such as:

   - Planning for the needs of a fast growing population.
   - Mobilizing savings for capital formation in housing.
   - Developing an efficient building materials and construction industry.
   - Insuring proper land use.
   - Mobilizing self-help housing efforts.
   - Encouraging more desirable rural settlement, notably in Ujamaa Villages.

2. Urban housing is a particularly difficult area. In the rural areas, a simple dwelling made of local, natural materials, without plumbing, electricity, or other related facilities may be bearable, but in the crowded conditions of the town, the same standards create slums with serious public health hazards and socially demoralizing consequences.

3. The housing program for the Second Plan, both in urban and rural areas, has been worked out bearing in mind not only the needs for additional housing units to meet increased demand, but also the strictly limited availability of financial resources in the public sector.

4. In urban areas, the problem is to build houses which meet family needs and are suited to urban conditions, and which can be supplied at a cost within the resources of the lower paid worker. This problem will be met by lowering costs. Minimum standards will be fixed separately for urban and rural areas to be within the financial reach of the majority of people. Further, the money devoted to housing will be more efficiently utilized in terms of serving greater numbers of people per shilling spent.

5. The rapid growth of urban population can claim huge investments in infrastructure. This may lead to conflict between different objectives. On the one hand, shelter must be provided for urban populations, while

on the other, Government is committed to redressing the imbalance between urban and rural areas. A sound housing policy must, therefore, harmonize this apparent conflict. This will be done if as many town dwellers as possible look to themselves, singly or jointly in groups, to provide housing with only a minimum of necessary assistance from the state. This is the essence of self-reliance.

6. Improved housing provides both tangible current benefits and hope for a better future, which can provide motivation to the people to promote capital formation by contributing their labor, and by mobilizing savings which otherwise would not flow into investment. Housing programs, based on self-help and mutual aid, assisted by some outlay of cash from the public sector, will contribute to general development by imparting new skills and promoting savings and capital formation, while giving a personal meaning to economic progress.

7. The housing problem, by its very nature, cannot be solved in a period of five years. The long term goal is the eventual liquidation of the existing shortage and inadequacies while meeting the demand for housing that results from increase in population. The concrete program for the Five Year Plan has been devised in a manner that aims at a progressive realization of this long term goal.

SELECTED U.S. PROBLEM AREAS

For the present, only certain problem areas in the U.S. could benefit from adaptations of overseas experience in aided self-help housing. The list of these problem areas is not exhaustive, but they do parallel overseas problem areas for which successful organized aided self-help housing programs have been devised.

Virgin Islands

A critical shortage of housing for lower and middle income families is aggravating social tensions within the Islands. There is also a shortage of labor, and aliens from the other West Indian islands are permitted to enter and work. Because they fail to meet residency or income requirements, many aliens and their families are not eligible for public housing. If they are able to find a place to rent, most families have difficulty paying rents ranging from $160-$200/month for an efficiency or one-room apartment, and up to $350 for three bedroom units. The housing shortage forces many alien men to leave their families behind. Consequently, there are large numbers of "single" men living in grossly inadequate one-room shacks with little opportunity to develop and enjoy normal family relationships. They have little to do with their free time and occasionally cause disturbances which greatly upset the conservative, non-alien population.

Permanent residents also have trouble finding decent housing. This, also, contributes to tensions between groups, and has on occasion created explosive situations. Admittedly, the alien housing problem is just a part of the Virgin Islands housing problem. But for many reasons it is a difficult one--technically and politically.

The U.S. Foundation for Cooperative Housing (FCH) and the St. Croix Labor Union jointly sponsored the first Section 236 cooperative housing project in the Islands. All eligible moderate income, alien and non-alien families will receive interest subsidies as prescribed by Section 236 of the U.S. National Housing Act. Thus, through subsidized mortgage interest rates, moderate income families will eventually acquire cooperative home ownership by paying less than one-half of the rentals charged for very substandard housing. These monthly charges cover all housing costs including major maintenance, repairs, electricity, and water. Down payments are only $200 to $300.

More projects like the St. Croix Labor Union Cooperative could go a long way toward relieving the housing shortage in the Virgin Islands. Yet, the German experience would seem to indicate that the interrelated and interacting socio-economic problems which afflict a good many families living within the German alien labor projects are not completely relieved by the provision of decent housing. The opportunities which characterize the FCH/Labor Union cooperative project--opportunities for low cost home ownership under terms more favorable than those presently available--do go a long way in giving alien families a necessary feeling of permanence and belonging.

Yet, in spite of the very favorable terms available under Section 236, there are many alien and non-alien families who, because of the very

high living costs in the Virgin Islands, will have difficulty in accumulating the very modest down payments. *Overseas experience in utilizing, on an organized aided self-help basis, family labor for down payments may be applicable to the situation in the Virgin Islands and to Section 236 projects in other parts of the United States.*

At the request of the Virgin Islands Community Action Program and the Governor's Office, the Office of Economic Opportunity (OEO) has assigned an engineer/housing specialist to the Virgin Islands. He will work one year in organizing and training families not being reached by existing housing programs in forms of self-help housing construction and repair. OEO estimates that in view of high labor costs, as much as half of construction costs can be saved by using self-help techniques, thus enabling the program to reach families who could not improve their housing situation through present programs. (Many of the families who could be served by the program live on their own land in small houses which need to be enlarged or improved.) The assignment of a self-help expert to the Virgin Islands indicates an interest on the part of the government in utilizing self-help techniques to meet certain housing needs.

One of the major constraints inhibiting the development of organized aided self-help in the U.S. has been the cost of employing the necessary technical and community organization staff. This is a high overhead item when considering budget and ceiling limitations.

A possible solution is the use of volunteers, similar to those used extensively and effectively in the development of U.S. housing programs and projects. Use of the existing Peace Corps Virgin Islands facility is a possibility for training volunteers in a Virgin Islands aided self-help program. The U.S. Volunteer Service (formerly VISTA and Peace Corps) could be a source of volunteer manpower in providing technical assistance. On-the-job training and involvement in Virgin Islands projects would provide practical working situations for volunteers and could contribute to the development of housing programs on the U.S. mainland, as well as overseas.

The Indian Reservation Housing Problem

The Indian housing program was the first serious effort to carry out a large-scale, federally-sponsored and assisted, organized aided self-help housing program within the continental United States. It drew very heavily upon overseas approaches and methods, primarily the mutual help housing program developed by the Social Programs Administration of the Commonwealth of Puerto Rico.

In an effort to cope with the housing problem, 110 Indian tribal councils formed tribal authorities. For the past ten years, HUD, the Bureau of Indian Affairs (BIA), and the U.S. Public Health Service (PHS) (which provides water and sanitary facilities), have been working to develop conventional low-rent and organized aided "mutual-help" projects through Tribal Councils and Tribal Housing Authority.

The Tribal Housing Authority began to develop, within its existing legislation authority, an imaginative formula for home ownership. An Indian

family who could work together with ten to twenty other families, could earn an equity of at least ten percent in their home. This, together with the value of the land, usually contributed by the Tribe in the form of a lease to the Tribal Housing Authority, would give Indian families a substantial equity. By maintaining the house and paying a small monthly servicing charge and insurance premium to the Tribal Housing Authority (usually $7 to $16), together with an additional equity payment based upon the family's income, Indian families could achieve complete home ownership within a relatively short period of time. The higher the equity payment, the shorter the period. Contributions from the Public Housing Administration (now Housing Assistance Administration) could further shorten the amortization period by applying the annual contributions remaining after meeting its development cost financing responsibilities on a basis similar to the way it contributes its annual subsidy to conventional low-rent public housing projects.

A large number of mutual-help projects were also started within the smaller Indian reservations and communities scattered throughout Michigan, Minnesota, Wisconsin, Nevada, western Washington, and lower Alaska, as well as almost every large Indian reservation.

[illegible]

Rental Housing. The first Indian housing project was developed and constructed in South Dakota, using the "conventional" method. The conventional program in Indian areas is essentially a program in which the housing is constructed for a local housing authority by a building contractor or developer, and is operated as rental housing by the local authority. For more stable financing of the development costs of the projects, the local authority sells its bonds to private investors. Under the terms of the U.S. Housing Act, the interest received by the owners of the bonds is exempt from Federal income taxes. HUD agrees to pay annual contributions in an amount sufficient to assure payment of the annual debt service (principal and interest). These contributions are pledged as security for the local authority's bonds. The combination of the tax exemption and security for the bonds enable them to be sold at unusually low interest costs.

The dwelling units are rented by the local housing authority to low-income families at rents based on their income, but no greater than one-fourth of the families' adjusted income. In establishing the financial feasibility of a proposed project, the average annual routine operating expense for the first 5 years of operation must be no greater than 85 percent of achievable dwelling rent.

Mutual-help program. The mutual-help program was established by HUD in 1964 in cooperation with the Bureau of Indian Affairs to meet the needs of very low-income American Indians on reservations who cannot afford even the modest rents necessary under the conventional low-rent public housing program. The basis of the mutual-help method is to provide an opportunity for home ownership which will be a strong incentive for participants to build and maintain their own homes. Under the plan, a group of participating American Indians contribute their labor in the construction of the houses. In addition, the participants, or the Tribe, contribute the building sites.

Under this method, the participants are given a lease-purchase type of option and receive equity credit, in amounts approved by HUD, towards the purchase of their homes in lieu of cash for their contributions. An incentive for the participants to make as great a contribution as possible exists because the greater the portion of the development cost represented by the equity credit received, the shorter is the period of time which lapses before they become home owners. During occupancy, the Indian household is required to perform maintenance and make a monthly payment based on income. This payment may be no greater than 25 percent of adjusted family income. Because the monthly payment does not include reserves and maintenance expenses, it is substantially less than conventional public housing rents.

HUD contracts to pay annual contributions at the highest authorized annual rate to help repay the funds borrowed by the housing authority in the development of the mutual-help housing. Should the participants' contributions (i.e., their initial equity) constitute 20 percent of the development cost of the housing, HUD's annual contributions could retire the loans (and the participants could achieve home ownership) in about 17 years. Although a higher annual contribution contract rate is paid, the shorter amortization period and the lower development cost results in a total Federal subsidy that is substantially less than under the conventional program.

[illegible]. Under mutual-help, and conventional rental programs as well, HUD had two partners: the Bureau of Indian Affairs (BIA) (Department of Interior) provided administrative assistance to the Tribal Local Housing Authority and construction supervision to the Indian participants; and the Indian Health Service (HEW) provided sanitary facilities. In January of 1969, HUD agreed to include the cost of individual water and waste facilities, where IHS community sanitation systems are not available, in the total development cost (TDC) of the dwellings. In 1971, HUD agreed to include TDC on-site costs for:

- Water and sewage facilities.
- All-weather streets, sidewalks, curbing, and street lights when they could not otherwise be provided in a timely manner.

The Mutual-Help housing program was never intended as a panacea for the Indian housing problem. From the beginning, it was recognized that only a fraction of any population group has the stamina and motivation to work during most of their free time for extended periods. Yet the program did not measure up to the expectations of many Indians, or Housing Assistance Administration and BIA staff. The one basic problem was that the projects took too long from the point of view of those with the responsibility of meeting housing production targets.

The building time was much longer than originally estimated because many Indian men spend a great deal of time looking for work, and are very often earning "bread money" during the building season. The fact that projects were completed, even after being under construction for two or

three years could support the assumption that home ownership is a primary "felt need" of the Indian people.

The California Indian Problem

Many thousands of rural California Indians have not benefited from housing and community improvement programs available to other Indians. There are a number of reasons for this situation. California Indian extended family groups live on small parcels of land called "rancherias." These parcels of land, which are held in trust for the Indians by the Federal Government, are scattered throughout the State. Even if the legal and financing impediments and other technical problems could be overcome, the logistical problems of helping and working with so many small groups of people are beyond the staffing capacity of the Department of Housing and Urban Development and the Bureau of Indian Affairs offices in California. California Indian leaders have identified the appalling conditions under which many California Indians are forced to live as the most serious problem facing their people. Present legislative authority and imaginative programs like the "Turnkey" programs are flexible enough to permit any number of solutions, provided HUD and BIA can find a way to overcome the logistical problems and bring the programs to the point where they can be financed.

One possible solution is the establishment and development of a non-profit California Indian housing development corporation with a board representing all California Indians. With the necessary organizational and technical assistance, it could undertake the formulation, development, and management of HUD/BIA support programs.

Establishing and developing Indian tribal housing authorities as permanent institutions, which could assume the continuing responsibility of developing and managing Indian housing programs, was the primary objective of the former Public Housing Administration (PHA--now Housing Assistance Administration) and the BIA. These tribal housing authorities are established, and, with intensive assistance and development, they could assume more and more responsibility in resolving their housing problems.

SELF-HELP AND THE U.S. URBAN PROBLEM

Population-wise, the Virgin Islands and the Indian housing problems represent only a small portion of the U.S. problem. Their importance and value, in terms of the huge U.S. urban problem, lie in the possibility of using organized aided self-help housing programs as a framework for formulating and testing approaches, methods, and techniques which could ease the deterioration of urban residential neighborhoods and relieve the social tensions within inner city areas.

Overseas housing experts have for the most part written off organized aided self-help as a way of relieving the developing world's urban housing problem. They argue that most urban families are usually employed and subject to too many distractions to participate in organized aided self-help housing programs. Yet the German post-World War II experience, success with urban aided self-help in Trinidad, Nicaragua and Guatemala, and a limited amoung of experience in the U.S., indicate that when there is a need, coupled with adequate assistance, properly motivated families will work together and individually in an effort to improve their housing.

A substantial amount of U.S. urban experience in aided self-help has been in the rehabilitation of deteriorating houses and apartments. Many of the organization and orientation techniques, management methods, and project implementation practices used overseas in new aided self-help construction are applicable to urban aided self-help rehabilitation projects. In fact, the family orientation and education techniques perfected in Puerto Rico could be helpful in preparing public housing project families for new responsibilities when public housing projects are converted, for example, to cooperative ownership.

CONCLUSIONS

From the close of World War II until the 1960's, the United States encouraged and supported aided self-help housing programs as a method of helping people improve their shelter to an extent they never could alone and unaided.

The objective was to alleviate the housing problems that faced the developing countries and those areas devastated by the war. The social values gained from helping people contribute toward the improvement of their living conditions was recognized, not only within the context of housing and shelter, but also within that of comprehensive economic and social development. The concept was based on the idea that a recipient country was willing to invest its own resources in economic and social development programs. In the 1960's, however, U.S. foreign assistance programs changed emphasis from technical assistance to concessionary loans. More capital was made available to the developing countries of Latin America than was advanced for worldwide housing development during the previous decade. Aided self-help and people-oriented programs were not encouraged to the previous extent.

Admittedly, aided self-help housing programs, as they had developed during the 1950's, would have had difficulty in absorbing the capital that was invested by the U.S. and other development assistance organizations. The question is: Would the management and collection problems be as critical if more effort had been devoted to the citizen participation and human development techniques employed in former overseas aided self-help housing programs?

More than twenty years of direct involvement in foreign housing programs should enable this country to profit from the successes and disappointments. This has been done to a limited extent. For example, recipient local governments in the U.S. have been required to demonstrate through "Workable Programs for Community Improvement" that they have a stake in the same programs and goals for which they seek Federal assistance. *If self-help and the "Workable Program" have validity and value on the national and community level, the same advantages, benefits, and values should be worth seeking on the family level.*

Changes in policy and withdrawal of support for the more difficult social and human development types of programs contributed to the demise of other Central and Latin American aided self-help housing programs. Examination of fifteen years of experience in two Central American countries indicates that governments tend to undertake social development programs during periods of social and political unrest, and abandon them at the first sign that tensions have eased. However, collection and management problems, which have reached crisis proportions in many Central and South American projects constructed by governmental housing organizations with external loans, has caused international lending agencies and the governments responsible for repaying the loans to focus on new ways to meet Latin America's tremendous housing and urban growth problem. People-oriented, self-help programs are again under consideration.

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