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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE SELF-HELP METHOD OF SUPPLYING HOUSING TO RURAL LOW-INCOME FAMILIES: AN EXPLORATORY STUDY

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

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ROBERT D. McMINN

Norman, Oklahoma

1974

THE SELF-HELP METHOD OF SUPPLYING HOUSING TO RURAL LOW-INCOME FAMILIES: AN EXPLORATORY STUDY

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ABSTRACT

There is a pressing need for housing low-income families in rural areas in the world. Several programs have been set up to meet this problem. The self-help housing method is a technique that has been used in overseas areas and in the United States. This method of providing housing allows persons to assist in the construction of their own houses. By contributing their labor, low-income persons are able to acquire decent housing which they could not otherwise afford. The problem with which this study is concerned, is to determine whether or not the technique of self-help housing is a feasible means of providing decent shelter to low-income families in rural areas. Self-help housing brings attention to a method of providing housing that needs encouragement from the government. The study includes an examination of some examples of self-help housing in selected foreign countries, in the United States, and in three self-help housing projects in Oklahoma. Several methods of investigation are used in the study. Documents were used

to investigate the formation, operation, and evaluation of examples of self-help housing overseas and in the United States. Again, documents were used to examine the formation, operation, and evaluation of the local self-help housing projects in Oklahoma. Interviews were conducted among a large number of people, which included government officials and housing experts. For the investigation of the local self-help housing projects in Oklahoma, the field survey technique was used. Analyses were made of the results. Primary sources, such as government documents and interview results, were used in the study. The study is divided into two main parts Part I is a presentation of the background and general considerations involved in the study. Part II is a presentation of the field study of self-help housing in Oklahoma. The major findings of the study are: (1) self-help housing is a feasible technique for meeting the housing needs of low-income families in rural areas, (2) self-help housing contributes towards psychological feelings of satisfaction and builds up confidence that leads to a greater feeling of individual worth, (3) self-help housing assists in the learning of new skills in vocations and social relationships that increase the potential of the individual

for community living, and (4) self-help housing, when properly applied, increases housing production, decreases costs to the user and to the public, and contributes to the elimination of the symptoms and causes of poverty.

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PART I

BACKGROUND AND GENERAL CONSIDERATIONS

What is self-help housing? What is the importance of the concept of self-help housing? These are only two of the questions that are discussed in Part I of the study. In Chapter I, the introduction to the study, self-help housing, as a concept, will be explained. There will also be a discussion of the importance of the problem, the scope of the investigation, the method of the study, the materials used, and the organization of the study. The lessons of overseas experience in the use of self-help housing will be investigated in Chapter II in an attempt to discover whether or not self-help housing has proven to be a feasible concept in providing low-cost homes for low-income families. Chapter III contains a discussion of housing policies, housing programs, and self-help housing projects in the United States in an attempt to show that self-help housing has worked where it has been used in the United States but, unlike some overseas areas, there has really been no great commitment to this type of housing program on the part of the government.

THE SELF-HELP METHOD OF SUPPLYING HOUSING TO RURAL LOW-INCOME FAMILIES: AN EXPLORATORY STUDY

CHAPTER I

INTRODUCTION

In a world confronted by the awesome problem of burgeoning populations, the problem of housing is juxtaposed with similarly frightening intensity. All the nations of the world, whether developing or with advanced technology, possess a common burden of meeting the problem of population explosion and the problem of housing the masses of mankind. It becomes almost automatic that where you have people, you have to house them. But the stark reality of human existence is that there is not enough housing to protect a huge number of people from the elements.

The horrors of ghetto existence, the inadequacies of housing for the poor, destitute, and powerless--characteristics of the blight that has descended upon the urban areas of the world--do not hold in themselves the complete picture

of the problem of housing. There also exists a problem for housing in the rural areas--especially for those in the low-income bracket.

Recognizing the staggering proportions of the problem of housing, the nations of the world have set up policies and agencies to deal with this problem. Programs, techniques, and methods have been developed to meet the housing problem of mankind. Governments have spent inordinate sums of money for housing projects to meet domestic, as well as international, needs of housing. The United States Government has appropriated large sums of money towards meeting the problem of housing in the United States as well as in the form of foreign assistance to meet housing needs in many countries over the world.

There are, indeed, a number of techniques by which nations hope to meet the housing needs of their peoples. The self-help housing technique is one method that could be used to meet housing needs, and it does not require a large initial capital outlay before doing so. Self-help housing is considered a method by which many families, who otherwise could not afford it, could obtain decent housing through their own efforts at a relatively small capital expenditure.

Self-help housing techniques have been used overseas in order to alleviate the housing problems that faced the developing countries and many areas devastated by war. The same techniques were also used in a number of countries, including the United States, which have a fairly advanced technology. Self-help housing has not been the monopoly of any country, whether developed or developing. It has had fairly world-wide application and varying degrees of success in achievement.

Whatever the difference in degree as to the application of the self-help housing technique (aided, unaided, independent or sponsored), the concept is well understood as a method which helps people to improve their shelter if they cannot do it alone and unaided. It should be pointed out that self-help housing is not intended to be understood as either the only means or the most successful technique in meeting housing needs. But it has merits to recommend it as a feasible technique toward meeting housing needs.

The concept of self-help housing as a technique has certain positive aspects. For one thing, a person who has built his own home has an interest, an appreciation, and a deeper responsibility in his home. Further, the experience of low-income families working together with local community

leaders over a relatively long period contributes to better understanding between the two groups. Finally, self-help is an approach which may be tailored to the problems and way of life of the people who determine, in the final analysis, the success or failure of any housing program.

Considering, therefore, that self-help housing has been used as a technique in overseas and U.S. areas and that there exists a massive housing shortage especially in rural areas for low-income families, it becomes apparent that a study of overseas, U.S. and local experiences in the use of self-help housing techniques may prove valuable toward meeting housing needs in rural areas for low-income families. With these premises in mind, this investigation was undertaken.

Statement of the Problem

A problem of housing exists both inside and outside the United States. Such a problem will be with us for sometime. Some solution or solutions must be found and applied in order to alleviate the housing problem for many families, especially low-income families in rural areas. One such solution is the self-help housing technique.

The technique of self-help housing has been used overseas, in some areas in the United States, and in three

self-help projects in Oklahoma. The study of the experiences in self-help housing in all these places can be valuable toward meeting the housing shortage for low-income families in rural areas.

The problem of this study is to investigate whether or not self-help housing is a feasible technique for meeting the housing needs of low-income families in rural areas by examining the examples of self-help housing in overseas areas, in the United States, and in three self-help projects in Oklahoma.

Importance of the Problem

The subject of self-help housing as a technique for meeting the housing needs of low-income families in rural areas is important because it offers one solution towards providing decent housing for such families in many rural areas of the United States and elsewhere. The study of the experiences in self-help housing in overseas areas, in the United States, and in Oklahoma becomes important in that the lessons learned from such experiences, with encouragement and assistance from the government, can go a long way toward achieving national housing goals, especially for housing low-income families residing in rural areas.

Scope of the Problem

This study explores the experience that selected countries, some areas in the United States, and three projects in Oklahoma have had with the self-help housing technique as a means of providing housing to low-income families in rural areas. It will not include a study of Bureau of Indian Affairs mutual-help housing programs or independent self-help housing activity such as owner-built housing.

Method of the Study

Several methods will be used in the study. Documents will be used to some extent in the study of overseas and U S. experiences in self-help housing. Interviews will be conducted among a large number of people, including government officials and housing experts. A field survey, with personal interviews as the main technique, of self-help housing administrators and participants in Oklahoma will be conducted. Analyses are to be made from the readings and interviews.

Materials to be Used in the Study

Primary sources such as government documents and the results of face-to-face interviews will be used to a large extent. Secondary sources, including books, pamphlets, periodicals, and newspapers are considered valuable in the preparation of this study.

Organization of the Study

The study is divided into two main parts. Part I is a presentation of the background and general considerations involved in the study. There are three chapters in Part I. The introduction is in Chapter I. In Chapter 2 there is a discussion of the overseas experience in self-help housing. The discussion of the domestic, or U.S., experience in self-help housing is in Chapter 3. A presentation of the field study of self-help housing projects in Oklahoma is in Part II of the study. There are three main chapters in Part II. The methodology of the field study is presented in Chapter 4. A description and analysis of the three self-help housing projects in Oklahoma are presented in Chapter 5. The results and analysis of the participant interview data are presented in Chapter 6. The concluding chapter of the study is Chapter 7.

CHAPTER II

OVERSEAS EXPERIENCE

Introduction

In this chapter, the study looks to the overseas experience in self-help housing in an attempt to see certain patterns that may prove useful to governments who have failed to recognize the crisis in providing decent housing to low-income families. An attempt will be made to discover whether, and to what extent, an overseas experience in self-help housing actually exists.

The basic housing problem for any government is how to provide a decent home for each citizen. The government need not concern itself with the housing needs of those citizens with sufficient income since they can satisfy their needs directly through the building industry. The primary concern of the government is to help low-income citizens obtain decent low-cost housing.

The most critical housing needs are in the less developed countries (LDC's). Exploding populations and the

absence of basic institutions of capital, finance, construction skills, modern building materials, etc., make their problem more critical. History is not a proper setting for analyzing the changes presently taking place in many LDC's. The transformation experience of developing nations took place over many decades. But the LDC's ". . . are feeling the impact not only of torrential population in-migrations to their cities but of mutations in their economies and in ways of life that have remained unaltered for centuries."[1]

In the LDC's the solution to the housing problem goes beyond the market place. Government intervention is essential because per capita incomes are too low to buy decent housing. The wide gap between housing cost and per capita income prevents the development of institutions essential to a housing industry. In most cities of Asia, the cost of a new house for a working family approaches $1,000. Housing costs would be about $10 per month if an average of $3.50 were spent for utilities, maintenance, insurance and taxes, and the terms were 20 years at 5 percent interest. This would require an unusual family income of $600 to $800, if as little as 15 to 20 percent were spent for housing. But

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[1]Charles Abrams, Man's Struggle for Shelter in an Urbanizing World (Massachusetts: The M.I.T. Press, 1964), p. 4.

the average per capita income for many LDC's is about $100 per year. In India, only 12 percent of the urban population have earnings of $600 to $800 per year.[2]

Low per capita income usually means low wage levels, but this does not always mean that low-cost housing can be produced. In the Phillipines, the People's Homesite and Housing Corporation, an official housing agency set up specifically to build a low-cost house, ". . . could not produce housing in 1958 costing less than $4,000."[3]

Too often the developing country will falsely assume that imported foreign construction materials are better than their own. For instance, building materials, most of which could be locally produced, accounted for 13 percent of Ghana's total imports in the early 1960's. In the Barbados, resort buildings were built with native limestone, but most families continued to buy Canadian lumber for their cabins, even though the wood became termite-infested in five to ten years. Pakistan has spent millions of dollars in foreign currency to import corrugated iron sheets as a roofing material, despite the fact that for centuries familes in certain

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[2] Ibid., p. 52.

[3] Ibid.

areas of Pakistan have used thatched roofs plastered on both sides to reduce the fire hazard and that many soils in Pakistan are suitable for the manufacture of stabilized earth blocks, requiring only five percent cement.[4]

In desperation the poor nation may attempt to borrow from its wealthy neighboring countries complex building codes, zoning, and planning laws, even though they may be irrelevant and require expensive resources to enforce. The new "planned developments" often lack essential commercial, church, and other neighborhood facilities. Where public transportation does not exist and the automobile is a luxury, the residents of such developments may suffer hardships in getting to and from work, shopping, and school.

Today one would at least hope that the LDC's would have the opportunity to borrow technical knowledge from the developed nations in order to cope with their enormous population problems. But this is not the case. The problems, with their related repercussions, are ubiquitous. There have been only limited advances in housing production or city planning from which the LDC's can benefit. In speaking of Europe and North America, Abrams acutely perceives,

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[4] Ibid., pp. 63, 64.

> The nations on those two continents are themselves still going through the paroxysms of housing disorder, and despite a hundred or more years of effort, they are still suffering from the afflictions of eighteenth- and nineteenth-century urban malformations.
>
> Housing progress lags far behind industrial progress in every part of the world. The technical genius that broke the secrets of speech, sound, space, and light still cannot build a house cheap enough for the rank and file.
>
> The anomaly is that the less industrialized the country, the less apt it is to have a housing problem. The moment it begins to develop industrially, its housing problem burgeons. The more it develops industrially, the more stubborn the problem becomes.[5]

Obviously wealthy nations, as well as LDC's, have low-cost housing problems. Unlike the LDC's, the developed nations have the resources and institutions necessary to provide decent housing for their low-income families. What is usually lacking is a realization of the need and an effective delivery system. That is, the wealthy nation can largely solve its housing problem, if the political and economic environment is conducive to such action. The leaders of the developed nations have not yet realized the enormity of the housing problem and how unrealistic their approach is. Abrams warns that,

> It is manifest therefore that all prevailing ideas of wholesale slum clearance and building of costly housing

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[5] Ibid., p. 51.

> must be abandoned, and that some fresh thinking must be brought to bear on the shelter problem. The provision of the bare essentials may have to be the world's sad but only reasonable alternative.[6]

The developed nations have not been able to solve their housing problems, even with the advantage of more time and resources. However, with the developed nations whether or not to provide housing on the basis of need is largely a question of priorities. In the LDC's the problem is more stubborn. The cost of housing is so much greater than the peoples' disposable income in the LDC's that the essential institutions in the housing industry have not developed.

Largely through experience, the LDC's have learned that they cannot solve their housing problem by importing building materials, techniques, and planning ideas from the wealthy nations. Their approach must be more direct and homemade. These nations must rely on indigenous materials and labor. It is essential that housing be a major part of the economic development process rather than waiting for the occurrence of such development to provide better housing.

It is important that the LDC's be able to rank low-cost housing programs as high on their lists of priorities for economic development as they would be expected to emphasize

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[6] Ibid., p. 54.

the construction of dams, bridges, railroads, airports, office buildings, and all the other tangible evidence of a developed civilization. Such a program of low-cost housing will provide not only homes but also jobs, personal income, construction skills, etc., in the same manner as programs for highways, railroads, harbors, etc. The concept of self-help housing involves not only providing homes, but also tangible contributions to the economic development of a developing country and more important, assists in the creation of intangible feelings of comfort, stability, security, and happiness--legitimate goals of any country.

There is no question that developed nations have the resources to perform such expensive tasks as slum clearance, urban renewal, etc. But the question remains: Why is it that they have not used such resources to provide decent housing for all in need?

External Influences

The main thrust of this chapter is a discussion of domestic policies and their implementation regarding self-help housing in a number of countries that have been chosen as examples for the purpose of this investigation. However, mention should be made of some attempts to help solve

problems in many countries by at least two entities, the United Nations and the United States. The contributions of these two entities will be briefly discussed insofar as they relate to the internal or domestic operations regarding housing in various countries around the world.

The problem of housing, especially that of providing low-cost housing, is a world-wide problem. And yet, in spite of the enormity and the urgency of this problem, there appears to be no central overseas program for low-cost housing or self-help housing. This may be explained partly by the fact that there is in reality no overall international program for low-cost housing. There are two dissimilar instances in the literature that point to some effort made in this direction; that is, in the providing of programs for low-cost housing.

The first instance is the contribution of the United Nations. The main contribution of the UN in this regard has been the furnishing of technical assistance in the preparation of programs, the conducting of surveys and inquiries on low-cost housing, and the compilation of research studies. While this effort has not made tangible inroads into the alleviation of housing problems, the UN should be credited

with having recognized housing and its attendant ills as one of the urgent problems of mankind.

While the United Nations acts only as a clearing house of information relating to housing and its needs, the United States, through its foreign assistance programs, has attempted to deal with the problem in terms of financial and material assistance to various countries in order that they might solve their housing problems.

However, a closer examination shows that the assistance the U.S. gave to various countries to alleviate housing needs did very little toward the creation of a systematic or intelligent framework for solving housing problems. There has been no attempt towards the formation of a housing assistance program nor any discernible attempt towards the selection of trained personnel to handle the housing assistance program. Further, there has been no attempt to determine the goals and objectives of a housing assistance program. Instead there has been mainly an attempt at image building for the benefit of the U.S. and less at making a significant impact on the housing picture of client-nations.

During the past decade the United States has forfeited its lead in assistance to developing nations. At the time the U.S. Government agencies and U.S. affiliated international

organizations reported on their activities in the field of international housing in 1962-1963, the United States was much ahead of other nations in technical and financial assistance. Eight years later, even though the world-wide urban crisis had become more severe, the United States was number 11 among the 16 donor nations of the world in development assistance per dollar of gross national product.[7]

By the end of 1963 almost $300 million in housing aid from the United States had been dispensed in Latin America. Abrams questioned the effective use of this money. He pointed out that before the Agency for International Development (AID) had given any financial assistance to Latin America, it had 26 people in the field, but in 1963, when $300 million in aid was being given, the number was only 16. There were only two people in the central office of AID who knew anything at all about housing. Both AID and the Inter-American Development Bank (IDB) were operating in the same areas without any policy concerning their relationship; e.g., both agencies made separate deals with the same officials. Neither agency was concerned about housing needs of

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[7]U.S. Congress, Senate, Study of International Housing Reports from U.S. Agencies and International Organizations, 92d Cong., 1st sess. (Washington, D.C.: Government Printing Office, June 18, 1972), p. (III).

low-income families. Most of the loans went to savings and loan associations, which lent the funds to higher-income families. Abrams stated that there was a strong desire for home ownership among squatters, but the aided projects were primarily isolated demonstration pilot projects which proved little.[8]

Abrams has suggested that it was the challenge of Fidel Castro and his promise of social reform to Cuba's proletariat that caused the United States to consider social reforms as a device for achieving hemispheric amity and stability. Until there was concern that Castro's success in Cuba might expand into other areas of Latin America, even the international development organizations were not interested in housing programs. For example, as late as 1963, not a single housing loan had been made by the International Development Association (IDA), a subsidiary of the International Bank for Reconstruction and Development (the World Bank).[9] The position of the World Bank was to consider housing aid where it was an integral part of a directly productive project, such as employee housing for an industrial

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[8]Abrams, pp. 100, 102.

[9]Ibid., p. 99.

plant. Most of the aid from the World Bank to housing took the form of investment in basic utilities and industries. Abrams believed that the attitude of the World Bank and its subsidiaries was that housing production would occur as a spontaneous result of aid given for everything except housing.[10]

Pilot, or demonstration, projects have a place as experiments and may serve to alleviate serious mistakes. But aided self-help must be offered in terms of large-scale operations, if it is to be effective in helping to house the world's homeless.[11] It was in this respect that AID failed. Many people thought that the major result of its demonstration projects was to enrich American builders rather than to significantly meet the housing needs of the host country. Had AID concerned itself with the housing needs of low-income families, it could have had a significant impact. Many self-help houses could have been built with the hundreds of millions of dollars AID spent subsidizing American builders and

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[10] Ibid., pp. 95, 96.

[11] U.S. Department of Housing and Urban Development, Division of International Affairs, Aided Self-Help in Housing Improvement, Ideas and Methods Exchange No. 18 (Washington, D.C.: Government Printing Office, Reprinted August, 1969), p. 19.

savings and loan associations. AID's policy has not changed substantially over the years. In 1970, 82 percent of its loans went to housing finance institutions, principally savings and loan associations.[12]

It is not the purpose of this investigation to discuss in detail the efforts of the United Nations and the United States in dealing with the universal problem of housing. What should be kept in mind, however, is the lack of any kind of central coordination either by way of research, information dissemination or by the furnishing of financial assistance in dealing with the problems of housing, especially low-cost housing in the world at large. Nevertheless, in some places some people are going about attempting, in their own way, to solve this problem. This is one reason why this paper is being written: so that the experience of some localities in Oklahoma may be studied and that lessons learned from their experience may be of some benefit to a lot of people. But the concept of self-help housing will be better understood after the experiences of several countries, using this method of house construction, are examined later in this chapter.

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[12]Study of International Housing Reports from U.S. Agencies and International Organizations, p. 2.

Selected Examples of Overseas Experience

If we look at the countries overseas there appears to be no program for self-help housing because there is in reality no program of housing, especially one that is directed toward the needs of low-income families.

Self-help housing around the world has had some significance in providing housing, but not very much. The process, although used in a number of countries and a number of states in this country, has had small impact. It is doubtful that the pilot demonstration self-help projects will set a pattern for housing low-income families in the host countries or elsewhere because of their limited objectives.

> If aided self-help is to take its proper place in rehousing the millions of people in this world who now live in totally inadequate shelter, it must eventually be considered in the light of a series of large-scale operations.[13]

An overall view of the overseas projects illustrates several things. First, the self-help housing process has been used over a long period of time in various parts of the world to satisfy various housing needs. Secondly, each project is unique because the self-help process can be custom-made to satisfy the particular housing needs of a given

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[13] Aided Self-Help in Housing Improvement, p. 19.

community. Thirdly, when appropriately emphasized, planned and organized, the experience of self-help housing can be more than a demonstration process. It can be incorporated into the housing programs of a country.

In those places where the government has efficiently administered a large-scale self-help housing program, significant impact has been made towards alleviating the housing needs of low-income families.

A few of the projects that have had the full support of government in their attempt to meet their housing needs through aided self-help will be reviewed. There are many other aided self-help projects in the world of a smaller scale but, because of their limited objectives, have not been included. For the purposes of this study, a brief examination will be made of self-help housing using large scale building methods in the following countries: Greece, Venezuela, Colombia, Puerto Rico, and Sweden.

Selected Examples

It may be surprising that almost all the countries listed with self-help housing experience on a large scale basis are LDC's. Large scale self-help housing is one operation where the developed countries will have to borrow

knowledge from the LDC's. The single exception to this situation is the case of Sweden, which will be discussed later in the chapter.

Greece[14]

Policy.--Greece demonstrated that self-help housing methods were economic in terms of capital, labor and time when she had to hurriedly rehouse almost a million refugees from World War II.

The existing building industry could not undertake to build or renovate 90,000 homes in hundreds of villages. However, because the agricultural economy, and thus the economy of Greece, was at stake with much of the rural areas destroyed, Greece entered into a housing program.

Greece did not have the materials or money to provide for such a giant undertaking. Consequently, the Ministry of Housing and Reconstruction decided that two things would have to be done. First, a nucleus house would have to satisfy the refugees for the present. The house, 30 square meters in size, could be expanded later, as more money and materials became available. Secondly, the method by which the houses would be constructed would be aided self-help. This meant

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[14]Ibid., pp. 33-35.

that the families would use locally available materials such as stone, adobe earth and perhaps timber, and construct their own houses with minimum aid.

Implementation.--The aid was in the form of hard-to-get materials such as nails, lumber, finished hardware, roofing materials and bricks. Limited cash bought materials and hired skilled mechanics who assisted in complicated phases of construction.

The people and the administration worked side-by-side in such a manner that 70,000 of the 90,000 houses were built by the families themselves, using the self-help method. The government built the remaining 20,000 houses for those who were still fighting or who had no income. The cost of the self-help house was $600 (US). Had they been contracted, the average cost would have been $1,200 (US). Thus, the 70,000 houses built under the self-help program reflected a savings to the economy of $42 million.

Evaluation.--This experience illustrates the advantage of the self-help method beyond the mere savings of money. Under the war-ravaged conditions of Greece, it was determined that an aided self-help housing program was not only the best means of rehousing a dislocated rural population but, within the time constraint, the only alternative.

Venezuela[15]

Policy.--The Venezuelan National Rural Housing Program was the result of a link between health and housing, under a comprehensive Environmental Sanitation Program. The Bureau of Malariology and Environmental Sanitation was the executor of the program.

Until recent years, malaria was one of the main causes of death in Venezuela. With the elemination of malaria through a successful eradication program, it was possible for people living in the highlands to migrate into the previously infested but fertile lowlands. In addition, the population exploded to a 3.6 percent annual rate of increase. Both of these factors created a substantial national housing shortage

Many of the houses located in the lowlands had mud-packed walls and thatched roofs. As the Venezuelans moved to elevations below 5,500 feet, a serious endemic disease appeared in large proportions, called Chagas disease, an incurable disease transmitted by a vector called Rhodinus

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[15]Venezuelan National Rural Housing Program, "Experience of a National Rural Housing Program: Case of Venezuela," Information Paper, presented by Arturo R. Ortiz to the National Rural Housing Conference, Warrenton, Virginia (Caracas, Venezuela: n.d.), pp. 1-19.

Prolixus (kissing bug) which damages the micardiac tissues and increases the size of the spleen and liver, thereby causing a highly anemic condition. The vector lived in the mud-packed walls and thatched roofs of houses in the lowlands and had affected about 1.3 million people who lived in the communities of 5,000 or less.

The National Central Office of Planning and Coordination (CORDIPLAN) determined the total number of housing units to be built under a five-year plan. Socio-economic studies selected the areas that appeared to have a social and economic future, and the distribution of the houses was based on the results of such studies. Of the 500,000 housing units to be built under the 1969-1974 five-year plan, 94,000 are to be built by the National Rural Housing Program in the rural areas and communities with population of less than 10,000.

During the period 1962-1967, the Inter-American Development Bank's Social Trust Fund made two loans, totaling $22 million, exclusively for the building of hygienic rural houses.

Implementation.--At the National Rural Housing Conference held June 9-12, 1968, in Warrenton, Virginia, Arturo R. Ortiz made the following introductory remarks on

the Venezuelan experience in rural housing:

> The Venezuelan National Rural Housing Program has constructed during the past eleven years more than 80,000 houses in more than 1,300 communities most of which do not exceed 5,000 inhabitants and thus providing better living conditions for approximately 500,000 Venezuelans. If these houses were placed on a twenty meter frontage lot, side by side in one single row, that row would be one thousand miles long or roughly the distance between Washington, D.C. and Miami, Florida. Most of these houses have an area between 60 and 70 square meters (646 to 753 sq. ft.) with three bedrooms, potable running water and inside plumbing fixtures which include the kitchen sink, laundry basin, and a bathroom with shower, toilet, and wash basin. Previously, the majority of these families lived in a one or two room shanty made of mud packed walls and thatched roofs and the ones that had inside potable water were rare. The goals set for the next five years, 1969-1974, are to build approximately 94,000 houses at a rate twice that of the previous ten years, and as may be seen, Venezuela is demonstrating that rural housing programs are an excellent and necessary instrument for raising the standard of living of its people in the development of the Nation.[16]

It was necessary to have more than 2,500 housing units under construction continuously in order to complete more than 1,000 houses per month in the Venezuelean program. This operation required a continuous flow of capital ($12,500,000) in warehouse materials, operating funds and housing inventory. The complexities of a housing activity of this size were illustrated by the related work that had to be done in order to build 13,000 houses under the program. An average of 290

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[16] Ibid., p. 1.

communities had to be selected, 39,392 applications processed, 450 land surveys completed, 409 housing projects designed, 16,000 loan documents completed, and 199,500 visits made. After an area had been selected and the number of houses to be built was determined, the participants were selected on the basis of pre-established criteria. The credit section determined the participant's income and his ability to make house payments, based on the origin of his income and the nature of his occupation. The repayment period was a maximum of 20 years, but participants with higher incomes were allowed to make larger monthly payments and thereby pay off their mortgage in a shorter time. A "variable payment plan" was used for participants who received their income from agricultural activities. In this case the participant paid not only according to his income but also at the time he received his income.

As will be described later in the case of Sweden, the municipalities were the owners of most of the land surrounding the local villages. The municipalities made land available to participants through long-term purchase.

The Rural Housing Program was originally based on a self-help commitment, which required an average of 12 months to build the houses. Experience showed that by using skilled

labor for jobs the participants found most difficult, the average construction time could be reduced to one month. Thus, progress was improved by taking advantage of the unique benefits resulting from complementing self-help labor with skilled labor. In 1960 the program, using only self-help labor, built 2,000 units with 1,400 employees. By 1969, using skilled labor with self-help participation, the program was building 12,000 houses per year with 1,500 employees.

Evaluation.--Venezuela was an example of what could be done when self-help methods were fully supported by the federal government. Although the initial objective in building the houses was to improve health conditions, the housing industry later became an important aspect of economic development. By using skilled labor to complement self-help labor, Venezuela made an adjustment to existing conditions that resulted in better construction of houses in less time.

Colombia

Policy.--Like Venezuela, Colombia achieved high production capabilities using self-help housing methods. In 1959 the Territorial Credit Institute (ICT) of Colombia began an aided self-help housing program which, in the 1960's,

produced 52,000 homes. At last report, the program was producing new housing for low-income families in Colombia at the rate of 20,000 units per year.[17]

The Cali, as the first project was called, was considered an emergency solution to an urgent need for housing in Cali, Colombia, where demographic growth had doubled in ten years.[18]

The program subsequent to the Cali project stressed a maximum of cooperation between the Department of Construction and social services and proved so popular that ten applications were received for each project house.[19]

The success of the project made possible a substantial expansion of the program in Colombia so that the Territorial Credit Institute increased its production of housing units from its earlier level of 3,000 units to 30,000 in 1960 and to an average of 20,000 units per year thereafter.[20]

Implementation.--The houses, set on a 1,600 square feet area with individual water, sewer, electric service, and

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[17]Aided Self-Help in Housing Improvement, p. 53.

[18]Inter-American Housing and Planning Center, Self-Help Housing Guide (Bogota, Colombia: Inter-American Housing and Planning Center, 1962), p. 4.

[19]Aided Self-Help in Housing Improvement, p. 53.

[20]Ibid.

front lawn, had concrete slab floors, exterior of fired handmade brick, asbestos-cement tile roof, exposed ceiling, shower bath, and two bedrooms. Each unit had almost 500 square feet of living area and cost about $850.[21]

The participant furnished all construction labor for this design, and in subsequent designs participant labor still accounted for more than half the total hours required, although skilled labor was hired after the initial project.[22] Newer designs for the aided self-help program were two-story row houses of cement blocks and prefabricated components. The living area had a little more than 800 square feet.[23]

Evaluation.--The Inter-American Housing and Planning Center labeled the Cali project a success from these results: repaid execution of construction; outstanding quality of labor; lower ICT investment cost than would have been required under contract; creation of savings for participant families; opportunity to experiment in low-cost housing; training for technical, social and administration ICT personnel who would administer similar projects in the future; the

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[21] Aided Self-Help Housing Guide, p. 5.

[22] Ibid.

[23] Ibid.

awakening of a desire for cooperative action and social improvement among the participating families.[24]

The self-help housing program in Colombia demonstrated how self-help housing was first used as an experiment under near emergency conditions, proved its worth, and consequently (by increasing the rate of production by emphasizing the use of skilled labor) became the primary means of low-cost house production for the economy.

Puerto Rico

Policy.--The self-help housing program in Puerto Rico demonstrated what could be done when full governmental resources were brought to bear upon the housing problem in rural areas. The rural housing program was an important component of an overall objective to improve the social, rural, and economic conditions of rural families. A section of the Land Law's Statement of Motives reads in part:

> . . . the legislature states the fundamental human right to all human beings who live exclusively by the tilling of 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 the law for the homestead of the citizen, their own homes; thereby delivering them from coercion and

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[24]Self-Help Housing Guide, p. 5.

leaving them free to sell their labor through fair and equitable bargaining.[25]

Two organizations were created by the 1941 Land Law: one was the Land Authority which was concerned with land use and its distribution, with emphasis on the break up of excessively large corporate holdings, and the other was the Social Programs Administration which was charged with responsibility for the resettlement of the landless Puerto Rican peasants.

A master plan was prepared by the Puerto Rican Planning Board for the resettlement of landless laborers (agregandos) in close settlements of rural communities. Under the plan small lots ranging from one-eighth of an acre to three acres in size were ceded free of charge to the families in usufruct for life-long use. When new land was needed, the Land Authority acquired it by eminent domain. The Social Programs Administration had the responsibility for developing the plots of land into suitable building sites and for providing utilities to each building site. The lot holders were required to obtain the consent of the Social

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[25]U.S. Department of Housing and Urban Development, Office of International Affairs, Self-Help Housing in Puerto Rico, HUD International Brief No. 5 Program Report (Washington, D.C.: Government Printing Office, June, 1971), p. 3.

Programs Administration before they sold, leased, donated or otherwise encumbered their right to the lots.[26]

The new rural communities provided building sites for 100 to 500 families each and were similar in layout to the planned community familiar in the United States. The new communities were designed to provide the proper socio-economic climate and the right physical setting for an overall improvement program at the lowest possible cost.[27]

Communities, as possible sites for a new housing project, were selected on a rational basis by taking into consideration such factors as water supply, location and accessibility by road, availability of construction materials, transportation facilities, and so forth.[28] Criteria for determining eligibility of families for the housing program included the following: they owned their lot or that the lot was covered by Title V of the Land Law; current housing was inadequate; the family head had good health; the

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[26]Organization for Social and Technical Innovation, Inc., Self-Help in Housing: The Feasibility of Large-Scale Expansion of Sponsored Mutual Self-Help Housing Programs in the United States, Report No. 7 (Cambridge, Massachusetts: Organization for Social and Technical Innovation, Inc., June 1970), pp. 57-59.

[27]Self-Help Housing in Puerto Rico, p. 3.

[28]Ibid., p. 6.

family had the ability to repay the building loan; and the family demonstrated the proper interest and commitment to the project.[29]

Implementation.--As of June, 1970, Puerto Rico had completed almost 39,000 houses in nearly 400 rural communities under its self-help housing program.[30] The houses were built by mutual-help groups of 30 to 50 families working simultaneously.[31] To help lower costs, the government bought all the building materials. The houses were designed so that additional rooms could be added later.

The first house used in the project had 324 square feet and was built of concrete floors, concrete block, reinforced columns and tie beam, with a reinforced concrete slab roof. The building materials cost about $300 and everything was constructed at the building site, using supervised participant labor. The price of the house included electrical conduit and outlets but not plumbing materials or fixtures. It took an average of five months to complete construction.[32]

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[29] Self-Help in Housing, Report No. 7, p. 76.

[30] Self-Help Housing in Puerto Rico, p. 7.

[31] Abrams, p. 170.

[32] Office of International Housing Service, Housing and Home Finance Agency, Ideas and Methods Exchange No. 13

In an effort to speed completion of the houses, a reinforced concrete house constructed by means of a standard set of panel forms was designed. The new method of construction reduced the average completion time per house to three months. The cost of materials remained at about $300.[33]

The house designs described above were subsequently replaced with houses which were larger. One of the later house designs (Type B1) provided for a bathroom. The Type B house required an interest-free loan of approximately $800 per unit for construction materials, equipment rental, and a percentage of the construction foreman's wage. It had two bedrooms with closets, a kitchen, dining room and living room combination and a front porch, which totaled 460 square feet. A bathroom was not included in this design nor were plumbing materials included in the cost of building materials.

A newer design, Type B1, contained the same room sizes as the Type B unit but, in addition, provided for a sanitary unit which made a total house size of 500 square feet. This

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(Washington, D.C.: Housing and Home Finance Agency, June, 1962), Item F.

[33] Ibid.

house required about $1,200 for government purchased building materials.

In both types of houses, the repayment plan was the same. There were no charges for administrative and supervisory costs. The family made a down payment of $50 at the beginning of the project and the balance of the loan, interest free, was repaid over a 10-year period in monthly installments of about $8.[34]

Evaluation.--Although the size of these houses was small compared to new construction in the United States, Puerto Rico had a different attitude towards housing. Type A, B, and B1 houses were considered the basic minimum shelter to which each citizen should be entitled. The new houses were, in most cases, larger than the dilapidated shacks that the families were previously inhabiting. By acquiring equity through their participation in the self-help program, the families were able to apply for low-interest home improvement loans in order to add rooms and amenities to the basic shell.[35]

The Puerto Rico self-help housing program has been a significant program whether viewed socially, economically, or quantitatively. Two essential conditions have made it so:

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[34] Self-Help in Housing in Puerto Rico, p. 7.

[35] Self Help in Housing: Report No. 7, p. 79.

1. The firm commitment of the Puerto Rican government to rehouse its inadequately housed rural population, backed up by the necessary funds and authority to acquire land, organize participants, provide technical assistance and materials, and necessary institutional structures for the above; and

2. The recongition that housing must be viewed in process terms, and consequent design of house types which provide minimally adequate shelter within the means of very low income people, and accompanying institutional arrangement for progressively upgrading these houses over time.[36]

Actually, the Puerto Rico self-help housing program is largely financed by United States government agencies, i.e., Department of Agriculture through the Farmers Home Administration. Even so, as will become apparent in the next chapter, the success of the Puerto Rican self-help housing experience is mainly due to the commitment made by the Puerto Rican government rather than the availability of U. S. funds.

Sweden

Policy.--Perhaps the earliest aided self-help housing project in the world was started by the Municipality of Stockholm, Sweden in 1927. This project began as a "Small House Cooperative" and later became known as "The Stockholm Plan."

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[36] Ibid., pp. 79, 80.

Under "The Stockholm Plan" ill-housed, low-income residents of Stockholm, who were reliable and willing, built their houses on improved building sites provided by the city. Unlike the United States and elsewhere, Sweden has not had any serious problems finding land for low-income housing projects. Many cities in Sweden, including Stockholm, held the surrounding land not already built upon as a land reserve for future use. When needed, it was leased, usually for 60 years. Until required for urban development, it was used for agricultural purposes.[37]

The families were able to purchase building materials directly from the city and received supervisory assistance, when required. The mortgage terms were 30 years, with an interest rate of 4 to 5 percent. The family participants had full responsibility for building their houses. Although they were free to sell their houses, having once sold they could never again participate in the plan.

Implementation.--From the beginning of the program, the participants built modern houses. They had all utilities, central heat, bath, and often a Finnish steam bath was built in the basement. Average construction time for the

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[37]See Aided Self-Help in Housing Improvement, pp. 39-41.

houses was about one year, since most of the family heads were not skilled craftsmen. Although standardization placed some constraint on design, it made possible high quality finishing with unskilled labor, and thus was employed to the maximum degree possible. Once the family had completed the basement walls, a prefabricated structural frame was delivered to the building site and usually erected in one weekend. Many of the pieces came pre-cut to size and the pipe cut to length and threaded for connection. Special chimney blocks made the construction of chimneys, using unskilled labor, possible. Estimated building costs under this plan were about 30 percent less than conventional contractor method. The savings were due to contributed labor by the families, prefabrication and standardization of materials, and mass production of materials. The house size ranged from about 650 square feet to a little over 860 square feet.

Evaluation.--Sweden recognized the need for, and subsequently began, a low-cost housing program almost 50 years ago. Its use of self-help methods enabled it to accomplish its objective to house low-income families at minimum cost. By having the advantages of a fully developed delivery system, Sweden was able to combine the efficiency of

prefabricated and standardized building components with the custom construction methods of self-help. This joining of processes enabled the program to offer the maximum in construction efficiency combined with consumer satisfaction.

Findings and Recommendations

The survey of literature relating to some examples of low-cost housing, especially that involving the self-help experience in overseas areas, brings out some significant findings.

Overall, the housing problem is serious on a world-wide basis and requires immediate attention. There is no central agency concerned with solving the housing problem on a world-wide basis.

Although the United States has spent large sums overseas for housing and related activities, the objective of the support has been primarily image building and has offered little toward a permanent solution to the housing problem, especially for low-income families.

The less developed countries cannot transfer knowledge from the developed countries in attempting to solve their housing problems because the problems are different in degree, and a feasible solution must be indigenous.

Various countries have had considerable experience using self-help techniques on a large scale basis. These experiences are contributing toward solving their respective housing problems. It is also likely that certain aspects of the overseas experience in using large scale self-help methods could have possible application toward a solution for housing low-income families in the United States and other developed nations.

CHAPTER III

DOMESTIC EXPERIENCE

Introduction

This chapter will cover the early history of self-help housing in the United States, the development of an official policy relating to housing and self-help housing on the national level, a description and assessment of the urban experience in self-help housing, a description and assessment of rural self-help housing, and the impact of self-help housing on national housing goals and policy recommendations regarding the use of self-help housing methods for the United States in the future.

Early History

The first record of an organized self-help housing project in the United States was in Pennsylvania in 1933. Later in the 1930's Pennsylvania was again the home of an organized self-help housing project. The first experience with organized self-help in an urban area occurred in Indiana

in 1950. Each of these projects had unique goals and was successful in its own right. These three early self-help housing projects will be described in this section.

Westmoreland County Relief Board
Norvelt, Pennsylvania

The first organized self-help housing project in the United States was completed in 1933 at Norvelt, Pennsylvania. The Westmoreland County Relief Board organized this project as a self-help project in an effort to generate new forms of livelihood for unemployed coal miners. Westmoreland Homesteads, as it was called, was initially funded by the Subsistence Homestead Division of the Department of Interior.

Westmoreland Homesteads began with 100 families who attempted to form a self-sufficient community. These initial participants raised gardens on their individual plots and as the community progressed, other houses, a cooperative store, and a factory were added. However, the community did not prosper until the advent of World War II when coal mines in the area were opened.[1]

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[1]Organization for Social and Technical Innovation, Self-Help Housing in the U.S.A.: A Preliminary Report, presented to the U.S., Department of Housing and Urban Development (Massachusetts: The Organization for Social and Technical Innovation, June, 1969), pp. 28, 36, 41.

Penn-Craft Pennsylvania

Penn-Craft was another self-help housing project begun in the 1930's with the help of unemployed coal miners. The American Friends Service Committee (AFSC) sponsored this 50-family project which built two-story stone houses with central heating and indoor plumbing. It took nearly six years to complete these homes, but the objective of the project--to build large, high quality modern homes rather than transitional housing--set the pattern for most future self-help housing projects in the United States. Margolis says:

> From that point on, nearly all sponsors of self-help programs viewed the technique as a way of catapulting low-income families from shacks to fully-appointed homes. . . .[2]

Flanner House Homes

The first post-World War II domestic experience in self-help housing of any size was called Flanner House Homes. The project was begun in Indianapolis in 1950 under the direction of Dr. Cleo Blackburn, director of the Board for Fundamental Education. The first house in this project cost more than $17,000 and required more than 5,600 man-hours to

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[2]Richard J. Margolis, Something to Build On, The Future of Self-Help Housing in the Struggle Against Poverty (Washington, D.C.: International Self-Help Housing Associates and the American Friends Service Committee, 1967), p. 21.

build. With experience, the project became more efficient. The average cost was reduced by $2,000 and the construction time by five-sixths. By 1965 Flanner House Homes had built 365 houses and had shown that mutual self-help was a workable method of house construction for moderate-income black families who did not have the down payment or were not able to get adequate credit because of discrimination.[3]

During its period of operation, Flanner House Homes was an efficient self-help housing project. It had a permanent professional staff of five and a workshop where the participants could precut materials and build cabinets. Flanner House Homes demonstrated that a mutual self-help program could operate on a long-term basis (15 years) and without government funded technical assistance. This project introduced the self-help method into an urban setting in the United States.[4]

Housing Policy and Goals

The development of a national housing policy in the United States has been somewhat ragged. A promise was made to decently house every American family in the Housing Act

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[3] Something to Build On, p. 21.

[4] Ibid.

of 1949. In the Housing and Urban Development Act of 1968 (almost 20 years after the initial promise) it was admitted that even though the resources had been available, we had not met the housing needs of the poor.

In this section the United States' housing goals will be set forth. The urban and rural agencies responsible for implementing these goals will be analyzed to determine what obstacles exist that may have interfered with the full attainment of the national housing goals.

Section 2 of the Housing and Urban Development Act of 1968 states,

Declaration of Policy

> Sec. 2. The Congress affirms the national goal, as set forth in section 2 of the Housing Act of 1949, of "a decent home and a suitable living environment for every American family."
>
> The Congress finds that this goal has not been fully realized for many of the Nation's lower-income families; that this is a matter of grave national concern; and that there exist in the public and private sectors of the economy the resources and capabilities necessary to the full realization of this goal.
>
> The Congress declares that in the administration of those housing programs authorized by this Act which are designed to assist families with incomes so low that they could not otherwise decently house themselves, and of other Government program designed to assist in the provision of housing for such families, the highest priority and emphasis should be given to meeting the housing needs of those families for which the national goal has not become a reality; and in the carrying out of such programs there should be the

> the fullest practicable utilization of the resources and capabilities of private enterprise and of individual self-help techniques.[5]

It appears that Congress was attempting to make clear some important points in this declaration of policy. Some of these points are: commitment to the promise of a decent home for every American family; many of the nation's lower-income families still do not have decent homes; our economy has the necessary resources and capabilities for executing this promise; the highest priority should be given to providing decent housing for those families whose incomes are too low for them to be able to obtain decent housing in the private market; individual self-help techniques should be utilized whenever practical.

Title XVI, section 1601 of the Housing and Urban Development Act of 1968 reaffirmed the 1949 goal and estimated that construction or rehabilitation of 26 million housing units over a ten-year period would be required to accomplish the objective. Six million of the 26 million units would be for low- and moderate-income families.[6]

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[5]Public Law 90-448, 90th Congress S.3497, August 1, 1968, 82 STAT. 476, Sec. 2, p. 1.

[6]Ibid., p. 126.

In carrying out this national housing policy, the Department of Housing and Urban Development (HUD) is charged with the implementation of a broad range of housing programs, including housing for low-income families in urban areas. In a similar fashion, the Department of Agriculture, among other things, is entrusted with carrying out programs relating to housing for low-income families in rural areas.

Urban Self-Help Housing Programs

Description.--The Federal Housing Administration (FHA), an agency of HUD, has two major programs for meeting home ownership needs of urban low-income families. The first, FHA Section 221, is designed to assist private industry in supplying housing for low- and moderate-income families and displaced families.[7] The mortgage for a single-family residence is generally limited to $18,000. So that interim financing may be made available for the purpose of financing rehabilitation, FHA is authorized to make commitments for the insurance of such mortgages prior to the date of their execution.[8] The owner/occupant of the property is

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[7]U.S. Congress, House, Committee on Banking and Currency, Basic Laws and Authorities on Housing and Urban Development, 92d Cong., 1st sess., 1971 (Washington, D.C.: Government Printing Office, 1971), p. 61.

[8]Ibid.

given the opportunity to the maximum extent feasible to contribute the value of his labor as equity in such dwellings.[9] FHA Section 221 financing has contributed significantly to the operation of Better Rochester Living, Inc., the largest self-help urban project in the United States.

Section 235 is the second major FHA program established by the Housing and Urban Development Act of 1968. The objective of this program is to provide housing to those low- and moderate-income families whose incomes are too low for market interest rate mortgages. The federal government may pay part of the interest cost in order to reduce the mortgage to a level the family can afford. The family must pay a minimum interest rate of one percent on the mortgage. The formula is designed so that the family's house payment approaches, but never goes below, 20 percent of its adjusted family income. Ordinarily, adjusted family income is gross family income, less 5 percent. There is also a deduction of $300 for each minor dependent.[10]

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[9] Ibid., p. 62.

[10] Organization for Social and Technical Innovation, Inc., Self-Help in Housing: The Feasibility of Large-Scale Expansion of Sponsored Mutual Self-Help Housing Programs in the United States, Report No. 7 (Cambridge, Massachusetts: Organization for Social and Technical Innovation, Inc., June, 1970), pp. 57-59.

In 1971 for the first time, total U.S. housing production reached two million units.[11] This was a considerable change from the rather consistent level of production of 1.5 million during the 1968-1970 period. Total FHA units as a percentage of total U.S. nonfarm units have increased since 1968. But home mortgage units have decreased in importance among total FHA proposed units during this period. In other words, housing for low-income families has been only a minor aspect of overall housing production in the United States.

Although both FHA Section 221 and FHA Section 235(i) home mortgage programs increased in relative importance during this period, they were still minor compared to total FHA activity.[12] By 1971 FHA Section 221 represented less than seven percent of FHA starts; FHA Section 235(i) represented about 17 percent. Even though home mortgages under FHA Section 221 had been in effect for over 20 years and FHA Section 235(i) did not begin until 1968, by 1971 FHA Section 235(i) mortgages were more than twice the number of FHA Section 221 mortgages.

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[11]Appendix, p. 187.

[12]Appendix, p. 188.

Analysis.--What is clear, from the examination of the housing programs for low-income families under HUD, is that only token attempts have been made to accomplish the objectives of the Housing and Urban Development Act of 1968. Part of the problem is due to legislation and part to HUD's half-hearted efforts to carry out the intent of Congress.

The Act of 1968 specified that low-income applicants had to satisfy the eligibility requirements of HUD. This meant that they had to provide acceptable credit histories and demonstrate their ability to repay the mortgage. In effect, the housing was not to be provided solely on the basis of need, as implied by the Act of 1968. Low-income families might be able to participate in the programs if their income were sufficiently low, but if their income levels were too low, they would not qualify.

Section 1714 of the Housing and Urban Development Act of 1968 required HUD to make a study of self-help techniques in construction, rehabilitation, and maintenance of houses for low-income persons and families. HUD made its report to Congress on August 15, 1969. Briefly, the report stated that self-help housing had been constructed in urban and rural areas by people of various racial origins and socio-economic levels. While self-help was generally slower than commercial

construction, there was no significant difference in quality of work. The participants achieved high equity-to-income ratios and low construction costs. The subsidy costs of the government were likewise lower than in similar programs. The report concluded,

> It is evident that self-help methods, properly applied, increase housing production, decrease costs to the user and to the public, and contribute to the elimination of the symptoms and causes of poverty.[13]

One would expect that such a favorable report on self-help housing would stimulate HUD to incorporate this concept in its low-cost housing projects. Just the opposite happened.

The Housing and Urban Development Act of 1970 repealed self-help demonstration projects.[14] In addition, it has been suggested that the Assistant Secretary of Production for HUD (who was previously in the housing industry) did little or nothing to encourage self-help housing.[15]

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[13] John F. C. Turner and Robert Fichter, Freedom to Build (New York, New York: The Macmillan Company, 1972), p. 24.

[14] Basic Laws and Authorities on Housing and Urban Development, p. 292.

[15] Freedom to Build, pp. 24, 25. The following explanation describes the interest and activities of Mr. Eugene R. Gulledge, Assistant Secretary for Production (HUD):

> Conversation with several professions involved in

Clay Cochran, of the Rural Housing Alliance, has suggested that HUD's hostility toward self-help housing is caused from program structure rather than from a deliberate policy. HUD is set up to handle housing commitments on a larger scale than most self-help housing projects can produce.[16]

One can safely sum up the urban housing program for low-income families by suggesting that it has been inadequate to meet the housing needs of urban low-income families. In addition, the government agencies have failed to support adequately the activities of self-help housing. This point is underscored by Grindley who found, while analyzing the characteristics of single-family dwellings in 1968, that six percent of independent self-help (owner-built) houses were financed by the government, as compared to 33 percent of the

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self-help housing in various roles revealed a uniform conviction of Mr. Gulledge's decided lack of enthusiasm toward self-help. Cited were his pre-HUD position in the housing industry, speeches he had made, and actions he had or had not taken. Mr. Gulledge felt he had to allay fears about his attitude towards nonprofit sponsors of housing in a speech noted in Keyes, "The Role of Nonprofit Sponsors in the Production of Housing," in Housing Banking and Currency Committee, Papers Submitted to Subcommittee on Housing Panels on Housing, Production, Housing Demand, and Developing a Suitable Living Environment, 92d Cong., 1st sess., 173 (1971).

[16] Freedom to Build, p. 26.

developer-built houses.[17] HUD's attitude toward using self-help housing methods to provide housing for low-income families in urban areas may be characterized as "benign neglect."

Rural Self-Help Housing Programs

Self-help housing projects have two major requirements for funding: first, technical assistance to the sponsor which is used to pay for the costs relating to the organization and administration of the self-help housing project; second, mortgage funds loaned to the participants which are provided to pay for the land and improvements, hiring skilled labor, purchasing building materials, etc.

Until the last few years, the Office of Economic Opportunity (OEO) has been the major source of technical assistance grants for self-help housing projects in rural areas. Since 1971 more and more of the technical assistance funding has come from Farmers Home Administration (FmHA), an agency of the Department of Agriculture. For several years, they have provided the mortgage funds for self-help houses in rural areas.

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[17] Ibid., p. 5.

Description.--The Farmers Home Administration (FmHA) has been the primary lender of mortgage funds for self-help families residing in rural areas. Section 502 of the Housing Act of 1949, as amended, established the authority for FmHA's Home Ownership Loan Program.[18]

These funds may be used for the acquisition of land, making necessary improvements to the building site, acquiring construction materials, and paying for any necessary sub-contracting work. The period of the mortgage may be for as long as 33 years; the interest rate may be as low as one percent. The family's annual housing expense, including principal, interest, insurance and taxes must be at least 20 percent of the family's adjusted income. Ordinarily adjusted family income is gross family income, less 5 percent. There is also a deduction of $300 for each minor dependent.

Under the provisions of the Housing Act of 1949, the low-income applicant must meet several requirements for a mortgage loan from FmHA. He must not currently be the owner of adequate housing; not be able to obtain the necessary credit from other sources on terms and conditions that he can be expected to meet; have sufficient income (which may

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[18]Basic Laws and Authorities on Housing and Urban Development, pp. 331, 332.

include social security and welfare) for the retirement of the loan, payment of taxes and insurance, maintenance of the house, and payment of other family living expenses; not have an annual adjusted family income that exceeds the limit for each state (currently it is $8,500 for the state of Oklahoma); elect to live in a rural area.[19]

Since mid-1972, however, each state has been required to make at least half its rural home ownership loans (Section 502) to families qualifying for interest credit.[20] The interest credit loan carries with it additional requirements which the applicant must meet. The additional requirements imposed on the interest credit applicant further reduces the number of people in a sparsely populated rural community who may qualify. The additional restrictions that the interest credit applicant must agree to are that the living area of the house will not exceed 1,200 square feet (1,400 square feet is allowed under usual 502 loan); the annual adjusted family income not exceed $7,000 ($8,500 is the maximum

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[19]Housing Assistance Council and Rural Housing Alliance, Farmers Home Administration Home Ownership Loans, Section 502, (Washington, D.C.: Housing Assistance Council and Rural Housing Alliance, April, 1972), pp. 1, 2.

[20]Rural Housing Alliance, Low-Income Housing Bulletin (Washington, D.C.: Rural Housing Alliance, August, 1972), p. 2.

without interest credit - Oklahoma levels); the minimum payment for housing, including interest, principal, insurance and taxes not be less than 20 percent of the adjusted family income; the interest credit agreement be reviewed every two years and the amount of the interest credit increased or reduced in line with any significant change in adjusted family income.[21]

What this means, in effect, is that additional requirements have been imposed by the government before the individual application for a loan can be approved. In substance, this also means that the number of persons who are able to qualify for such loans has been substantially reduced. It may be concluded that instead of increasing the opportunities for such loans to rural low-income families, the government has set up obstacles which rural families must hurdle before they can participate in the program. The program may, therefore, be nothing more than tokenism towards meeting the housing needs of rural low-income families.

The applicant's eligibility is determined by the County Committee of FmHA. The three members of the County Committee must be residents of the county, and at least two

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[21]Farmers Home Administration Home Ownership Loans, p. 2.

of the members must be farmers. The County Committee cannot approve the loan. Only the county supervisor has the authority to approve the loan after the County Committee determines that an applicant is eligible.[22]

The basic legislation for the various FmHA rural housing programs is Title V of the Housing Act of 1949.[23] Through the years FmHA has had its authority and responsibility go beyond extending financial assistance to owners of farms. Subsequent legislation has been enacted, which authorizes FmHA to extend financial assistance to many non-farm families as well as to farm families in rural areas.

The definition of what constitutes a rural area has likewise been broadened. In general, FmHA may operate in rural areas and towns whose population does not exceed 10,000. This maximum population limit has increased over the years from 2,500 to 5,500 to 10,000. One of the resolutions passed by the Second National Rural Housing Conference in 1972 was that FmHA's service area be further expanded to include towns up to 25,000 population.[24]

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[22] Ibid., p. 3.

[23] Basic Laws and Authorities on Housing, p. 329.

[24] Report of the Second National Rural Housing Conference (Washington, D.C.: National Rural Housing Alliance, November 30, 1972), p. 7.

The expanding limits of FmHA activities have caused changes in the composition of its farm and home ownership loans. In fiscal year 1962 FmHA obligations for both direct and insured farm ownership loans amounted to about $183 million. Obligations for rural housing loans were slightly more than $96 million. By fiscal year 1972, farm ownership loans, which were all insured (no direct), had increased to $349 million, an increase of 91 percent. Low- to moderate-income rural housing loans, also all insured, on the other hand amounted to more than $1,561 million, more than a 16 fold increase.[25]

Changes in the method of financing loans by FmHA have contributed greatly to its expanding operations. Farmers Home Administration makes two types of loans. A direct loan is one which is financed by direct appropriations from Congress. When the Housing Act of 1949 was amended to allow FmHA to make home ownership loans to non-farm rural residents, $80 million was appropriated for this purpose. However, the demand was so great that the funds were depleted in two months. Another method of financing loans, which would more

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[25]U.S. Department of Agriculture, Farmers Home Administration, Program Development and Administration Coordination Staff, Real Estate Loan Allotments and Obligations, 1962 Fiscal Year Through June 30, Table 1, and 1972 Fiscal Year Through June 30, Table 1.

evenly match local demand for these funds, was required. In 1968 FmHA had $100 million in loan notes, which were sold locally and turned over about five times per year. This meant that FmHA could provide about $500 million in loan funds per year. Since then the $100 million limit has been removed, and now insured loans are considered a practical way of raising money. In theory, FmHA is able to raise all the money it needs since the notes are sold locally to meet local demand.[26]

Farmers Home Administration's Report of Loan and Grant Obligations began providing information on self-help building loans in 1967. In that year 335 direct and insured self-help building loans, averaging $7,000 each were made. During subsequent years the self-help building loans became totally insured, and by 1972 the average loan value had increased to almost $12,000. Although the 1972 level of self-help building loans were more than one and one-half times the 1967 level, this gain was more than offset by higher house values. An example of the increase in house building costs was provided by the Rural Housing Alliance recently when the

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[26]Interview with Bill Murray, Legislative Representative on Community Development, National Rural Electric Cooperative Association, November 9, 1972, Washington, D.C.

higher cost of housing under FmHA's 502 home ownership program was analyzed.

The Rural Housing Alliance found that despite FmHA's interest credit program, which should have improved the agency's ability to reach low-income families, rising housing costs had decreased FmHA's ability to reach these families. The average cost of the houses had increased more than $3,000, although the houses were slightly smaller in size. The study also found that the level of the participants' average income had risen over the years. This meant that the applicant's income had to be higher in recent years, i.e., FmHA's ability to reach the lower-income groups had lessened.[27]

FmHA Technical Assistance Grants.--Section 1005 of the Housing and Urban Development Act of 1968 (PL 90-448) added Section 523 to the Housing Act of 1949. Section 523 authorized FmHA to make technical assistance grants to self-help sponsoring organizations. The purpose of this section was to facilitate the efforts of self-help sponsors in providing technical and supervisory assistance to self-help groups in rural areas and small towns. This legislation authorized FmHA to make grants to self-help sponsors and to

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[27]Low-Income Housing Bulletin, p. 5.

establish the Self-Help Housing Land Development Fund. This money was used as a revolving fund for making loans to sponsors for the acquisition and development of land as building sites to be subdivided and sold to mutual-help families and other selected groups. The loan, with an interest rate not in excess of three percent per annum, had to be repaid within two years. Because FmHA had been understaffed and its land fund guidelines had required so much red tape, these funds took 8 to 12 months to procure.[28]

During the three-year period (1970-1972) more than $2.8 million was available to FmHA for technical assistance, which they did not spend. Fiscal year 1970 was the first year technical assistance funds were available, but none of the available $1,250,000 was granted.[29] In FY 1971, $2,450,000 was available and $1,720,960 was granted.[30] Another $2,450,000 was available in FY 1972 and $1,617,910 granted.[31] Fifteen grants averaging almost $115,000 each were made in

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[28] Self-Help in Housing: Report No. 7, Appendix B.

[29] U.S. Department of Agriculture, Farmers Home Administration, Program Development and Administrative Coordination Staff, Report of Loan and Grant Obligations, 1970 Fiscal Year Through June 30, Table 1.

[30] Report of Loan and Grant Obligations, 1971 Fiscal Year Through June 30, Table 1.

[31] Report of Loan and Grant Obligations, 1972 Fiscal Year Through June 30, Table 1.

FY 1971, compared to 9 grants averaging $180,000 in FY 1972. Of the 9 grants in FY 1972, four were made to projects in California.[32]

Since the middle 1960's the Executive Branch has been involved in providing housing for low-income families through the activities of the Office of Economic Opportunity. Until 1971, when FmHA resumed this responsibility, all the technical assistance funding for self-help housing projects in rural areas had come from the Office of Economic Opportunity (OEO).

OEO Technical Assistance Grants.--The Economic Opportunity Act of 1963 established a housing program for migrant and seasonal farm workers under Title III-B, Section 312. Improved housing and sanitation was only one of several development programs for which technical assistance funds were used to carry out the purposes of Title III-B. Section III stated that the purpose was to:

> . . . assist migrant and seasonal farm workers and their families to improve their living conditions and develop skills necessary for a productive and self-sufficient life in an increasingly complex and technological society.[33]

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[32]Rural Housing Alliance, The RHA Reporter (Washington, D.C.: Rural Housing Alliance, September, 1972), p. 6.

[33]Basic Laws and Authorities on Housing, p. 646.

Section 321 pointed out: "For each such fiscal year only such sums may be appropriated as the Congress may authorize by law."[34] As a result, the Office of Economic Opportunity (OEO) grants were made for only one year, and this lack of long-term funding limited the sponsors' ability to plan for an expanded project.[35]

The OEO has been more specific in its housing program than FmHA in defining its target population and its overall objectives. Rural families and individuals who received at least 50 percent of their income from agricultural activities and whose income was below an OEO maximum limit were the target population for OEO Title III-B. The National Advisory Food and Fiber reported that there will be a need to find non-farm jobs for 40 percent of the current farm manpower by 1980.[36] Thus, a major objective of the OEO Migrant Division program was to prepare migrant and seasonal farm workers for upgraded jobs and even non-farm jobs, if they so elected.

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[34] Ibid., p. 647.

[35] Self-Help in Housing: Report No. 7, p. 25.

[36] Office of Economic Opportunity, Migrant Division, Title III-B EOA Programs for Migrant and Seasonal Farm Workers (Washington, D.C.: Government Printing Office, n.d.), p. 6.

The support given to self-help housing projects was one phase of this process because it helped the family to develop closer and more permanent ties with a community. Self-help housing had been considered one way to emphasize skill training needed for actual job placement and improve a family's ability to do for themselves.[37]

Through fiscal year 1973 about $21 million had been spent for housing by OEO, almost all of it through the Migrant Division. Supporters of self-help housing in OEO believed that the program served as a training ground for economic development at the community level. Self-help projects provided economic opportunity in two ways: equity in a home and development of a skill.[38]

The Office of Economic Opportunity funded three types of housing programs: indirect, direct, and multi-purpose. OEO provided indirect technical assistance funding through the Rural Housing Alliance. In 1973 the Rural Housing Alliance received $1.25 million from OEO to provide technical assistance grants to 14 self-help housing projects in amounts of $50,000

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[37] Ibid.

[38] Interview with Ernie Chabot, Migrant Division, Office of Economic Opportunity, November 14, 1972, Washington, D.C.

to $125,000 each. The Rural Housing Alliance received $250,000 from OEO for services it performed in assiting self-help housing applicants to obtain technical assistance funding, in supervising existing projects under its direction, and in preparing reports on these projects for OEO's review. The Migrant Division of OEO thought the arrangement was desirable since the Rural Housing Alliance had the resource people and OEO was in a position to know what was taking place in each of the projects. Indirect funding accounted for 33 percent of OEO's self-help housing budget. Direct funding was provided to three large self-help housing projects in California: Self-Help Enterprises, Inc.; Rural California Housing Corporation; and the Department of Human Resources Development. These projects received 57 percent of the housing budget. Some 10 percent of OEO Migrant Division's self-help housing funding was used to finance the housing section of various multi-purpose OEO grantees located in eight different states.[39]

Analysis.--The service to self-help housing projects provided by government agencies in rural areas has not been much better than the service provided in the urban areas.

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[39] Ibid.

FmHA does have the ability to work efficiently on a local level through its county supervisor. This has been helpful to self-help housing projects operating in rural areas. Unfortunately, it has also been the reason why some self-help housing projects never materialize. If the county supervisor does not wish to be bothered with self-help housing, he can stop the applications from going beyond his office. There is also the possibility of conflict of interest for the county supervisor and the county committee. If the self-help housing project is attempting to get housing for farm workers, local farmers may be injured. In many cases the farm worker will receive housing as part of his compensation. When the farm worker obtains housing elsewhere, the farmer may end up with empty worker houses and higher wage costs.

All in all, the FmHA self-help housing projects seem to have the best possibilities for success. The rural areas have a small number of building and land development restrictions to overcome, such as zoning, union requirements, building codes, etc.

Unfortunately, with the authority to make technical assistance grants, FmHA has begun to create new obstacles which the self-help housing project applicant has to

overcome. Many of these obstacles are created in Washington, D.C. and thereby may not be soundly based on local conditions. For example, in evaluating technical assistance applications, FmHA in Washington, D.C. states that they use a rule of thumb of $1,500 - $1,600 per housing unit. They realize from past experience that this is too low. Informally they encourage the sponsor/applicant to state that he will build more houses than he actually expects to. The danger is that someone could later criticize the self-help housing program because the projects built fewer houses than they said they would.

Another obstacle is that at the time of application for technical assistance, FmHA encourages the sponsor/applicant to get applications from potential participants. FmHA tells the sponsor/applicant that the participants will have to build within a two-mile radius in a given town within the county. Since FmHA prefers the mutual-help type organization for the participants, this means that the sponsor/applicant must obtain five to eight applicants who meet with the county supervisor's approval, agree to build their houses in the same county, within a two-mile radius, and use self-help methods. Since these parameters are imposed before the project has been funded, they have a decidely depressing

on the project sponsor and potential applicants. Considering the population limits (10,000 or less) and low density of population under which FmHA has to operate, no additional obstacles need exist to prevent self-help housing projects from getting off the ground. One might think that FmHA would be encouraging the development of the counties where they operate through low-cost housing programs. Often this is not the case.

Experience

In order to understand how self-help housing might be encouraged to work in the United States, the experience of two projects will be described and analyzed. The potential of either of these projects has not been fully realized because of insufficient support from government agencies.

One self-help housing project is in an urban area and the other in a rural area. The urban project involves using self-help methods and organization to rehabilitate single family dwellings. The rural project demonstrates the use of self-help housing methods to build new houses for migrant farm workers.

Urban Experience - Better Rochester Living, Inc.

FHA Section 221 has been important to the operation of Better Rochester Living, Inc. (BRL) in Rochester, New York. Organized in 1964 as a result of the experience of Flanner House Homes in Indianapolis, the BRL project has assisted families below a defined income ceiling and those whose houses required substantial rehabilitation. This limitation required BRL to work only with families who were able and willing to contribute significant hours of labor and to rehabilitate only those homes which required substantial work.[40] Under the FHA low-income family housing program, the project would obtain an FHA commitment in the name of the participant family. This FHA commitment enabled BRL to obtain local interim financing for the house during the rehabilitation phase, which usually lasted from 10 to 14 months. The project was responsible for accomplishing the rehabilitation work but the family, through "sweat equity," earned the down payment and closing costs. Once

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[40]Organization for Social and Technical Innovation, Inc., The Feasibility of Large-Scale Expansion of Sponsored Housing Rehabilitation Programs Using Self-Help Methods in the United States, Report No. 5 (Cambridge, Massachusetts: Organization for Social and Technical Innovations, Inc., June, 1970), p. 60.

rehabilitation was complete, FHA made its inspection and a mortgage was issued to the family.[41]

The primary objective of the BRL project was to help poor families who wanted to get out of poverty by using the housing process as a vehicle for social change.[42] The house was used as a carrot that was constantly held out to participating families so that they would straighten out their financial affairs and become credit worthy. Margolis stated that the BRL staff spent as much time rehabilitating the family's finances as it did rehabilitating houses.[43]

The tenant and potential home owner appeared to benefit from participating in the BRL project. He received experience and training and was able to get long-term mortgage financing. He created an equity in his property and had to spend for housing only about what he had previously spent for rent.[44]

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[41] Ibid., p. 36.

[42] Self-Help Housing in the U.S.A.: A Preliminary Report, p. 399.

[43] Margolis, Something to Build On, p. 23.

[44] Self-Help Housing in the U.S.A.: A Preliminary Report, Appendix V/9, 10.

The savings in the project came from several sources. First, BRL knew the real estate market in Rochester and bargained with cash and knowledge of code violations in order to get the houses at low prices. Second, the family contributed much of the labor during the rehabilitation process, under BRL's supervision. Third, the family saved housing costs by moving into the house while it was being rehabilitated. Finally, BRL performed low-cost services, for which each family paid $650 at the time of closing.

Repair costs per house averaged $3,000. Subcontracted work accounted for about 25 percent. The family's "sweat equity" amounted to about 30 percent, and the balance was the cost of materials, cabinets and fixtures.[45] The principal constraint on the BRL project was the time cost of red tape and the lack of long-term mortgage commitments by FHA.[46]

The BRL project demonstrated how self-help housing methods were used to provide decent housing to low-income inner city families. There are no doubts that the results involved more than a better physical environment. The

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[45] Ibid., Appendix V/7.

[46] Ibid., Appendix V/9, 10.

families were helped to qualify; they were involved in the process of selecting the neighborhood and house where they were to live; they were able to occupy the house during construction, and thus save rent; they were personally involved in the construction; and lastly, they were the recipients and participants of a dedicated and thorough development experiment.

It is to be noted that the BRL project was not hampered by the lack of applicants, difficulties in finding houses, problems of staffing, or other similar problems The BRL project was hampered by unreasonable restraints and procedures of the Federal Housing Administration.

Rural Experience - Self-Help Enterprises, Inc.

The American Friends Service Committee started a self-help housing project in 1962 to serve farm workers in the San Joaquin Valley of California. Primarily due to the suspicion of the prospective participants, only 20 houses had been completed by 1964. From this modest beginning Self-Help Enterprises, Inc. (SHE) was organized in 1965 as a non-profit corporation to provide technical assistance to mutual-help housing projects in the area. Within four years after the incorporation, SHE had served almost 1,000 families

with its rural self-help housing projects. These families represented over 6,200 people, located in seven counties in the San Joaquin Valley.[47]

Considering the difficulties, Self-Help Enterprises, Inc., has done an impressive job with its self-help housing efforts. The marriage of OEO (technical assistance funds) and Farmers Home Administration (mortgage loan funds) was performed on shakey ground. The Office of Economic Opportunity had been mandated to reach the very poor and therefore it imposed low level maximum limits on the self-help housing applicants' income levels. On the other hand, Farmers Home Administration avoided low-income families on the grounds that their loan repayment ability would not be sufficient to qualify for a long term mortgage. Irrespective of the dichotomy, however, SHE was able to use OEO and FmHA funds to develop the largest self-help housing project in the United States. By December, 1972 SHE had involved almost 1,600 families in its rural and urban self-help housing projects.[48]

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[47]Self-Help Enterprises, A Program with Low-Income Families in the San Joaquin Valley (Visalia, California: Self-Help Enterprises, Inc., n.d.), p.

[48]Self-Help Enterprises,Inc. "Project Report No. 16," (Visalia, California: Self-Help Enterprises, Inc., February 1, 1972 - November 30, 1972), Appendix, p. 3.

Self-Help Enterprises, Inc., has become increasingly dependent on FmHA for technical assistance as well as mortgage funding. This dependency on FmHA was caused by the uncertainty of OEO's continued existence and by FmHA's recent authority for making technical assistance grants.

During 1972 SHE operated three projects under individual two-year technical assistance grants from FmHA. SHE prepared a proposal for technical assistance funds for FmHA for a fourth project in 1973. In addition, SHE was resourceful in obtaining operating grants and loans from various foundations, churches, and other private sources. The inability to obtain a dependable source of long term technical assistance funds has continued to plague SHE's operations from the beginning.

Over its eight years of operation, Self-Help Enterprises, Inc., has been involved in several development activities other than self-help housing. In 1969 a modular component factory, named Bravo Industries, began operation. It was a company that produced interior and exterior wall systems, plumbing and furnace module systems, and mechanical system kits. By using components from Bravo Industries, SHE was able to reduce the construction time for some of

its urban houses by five days.[49] In 1972 Bravo Industries was spun-off from Self-Help Enterprises, Inc., into a worker-owned business.[50]

For several years VISTA Volunteers have trained and worked with SHE. As another activity, in 1970 SHE began to recruit and train Community Volunteers. Most of the recruits for the Community VISTA program came from the ranks of SHE participants.[51]

Yet another activity developed when, in 1969, the SHE staff initiated a job development program called Contract Opportunities, Inc. (COI). Contract Opportunities, Inc., used federal agencies, such as the Park Service and Forest Service, to provide contracts for small teams of low-income workers. By the end of 1971 sixty contracts, worth $350,000, had been secured. These contracts were executed by 250 families organized into 20 small businesses.[52]

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[49]Self-Help Enterprises, Inc., "Project Report No. 15", (Visalia, California: Self-Help Enterprises, Inc., March 1, 1970 - February 28, 1971), pp. 2-5.

[50]"Project Report No. 16," p. 5.

[51]Self-Help Enterprises, Inc., "Project Report No. 14" (Visalia, California: Self-Help Enterprises, Inc., March 1, 1970 - February 28, 1971), pp. 4,5.

[52]Ibid., p. 5; "Project Report No. 16," p. 5; "Project Report No. 15," pp. 6, 8.

Activities further broadened when volunteers, working with SHE, organized low-cost furniture buying projects. Arrangements were made to buy furniture from a wholesaler at 10 percent above his cost. Old furniture donation drives brought in furniture pieces, which were repaired and sold to the families at a low price. A participant-owned cooperative furniture business was also organized.[53]

In November 1967, SHE set up a cabinet shop, using grant funds from a private foundation. The cabinet shop provided facilities for training workmen who were previously seasonal farm workers. The cabinet shop was able to produce two complete sets of kitchen cabinets per day; it built and installed the cabinets in all the SHE urban houses and many of the houses in the rural program; it supplied on order precut shelves, window sills, trim and prefinished mahogany bases. It furnished water heater enclosures and cooler jackets at about one-half the price charged by other sources; the shop designed a precut and partially preassembled closet unit which used 25 percent less floor space than conventional closets; it offered participants a pine bunk set complete with mattresses for $63.[54]

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[53] Ibid., "Project Report No. 14," p. 7.

[54] Ibid., "Project Reports, Nos. 14, 15, 16."

Almost 90 percent of SHE's participants were Mexican-American. The remainder were either black or anglo. During 1969 Dr. James Smith, Professor of Economics, Pennsylvania State University, made a study of the characteristics of self-help participants in the SHE project. Briefly, the study found that more than 90 percent of the family heads were employed, although three-fourths of them had been on the same job for less than one year. Most of the family heads were employed as farm laborers, but 10 percent held moderately skilled job. Even though one-half the wives contributed to the family's income, about one-third of the families received some form of welfare assistance. After they moved into their self-help house, the family's average income increased from $3,542 to $5,284. The average amount of the mortgage for the self-help house was $8,037.[55]

Like BRL, the SHE project did much more than move low-income families into better houses. The project emphasized the development of skills for the participants and related businesses for the project. While OEO was able to provide "seed money" the project prospered, but funding was

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[55]James D. Smith, "A First Report on the Characteristics of Self-Help Participants in the San Joaquin Valley" (Pennsylvania State University, n.d.).

cut off too soon. The SHE project provided an excellent laboratory for demonstrating the advantages of joining self-help methods with large-scale prefabrication. Also like the BRL project, SHE was unable to develop to its full potential because it was not sufficiently supported by government agencies.

Impact on Self-Help Housing on National Housing Goals

Earlier in this chapter the housing policy and goals for the United States were discussed, together with the housing programs for low-income families in urban and rural areas. An attempt to relate the impact that self-help housing has had on achieving the national goals and what advantages might occur from greater utilization of self-help housing methods in the future will be made in this section.

The major problem that must be addressed in attempting to house low-income families is how best to fill the gap between the price the private builder must receive and the price the low-income family can afford.[56] Self-help housing contributes to the solution of this problem by making the

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[56] Self-Help Housing in the U.S.A.: A Preliminary Report, p. 123.

homeowner the builder who receives "sweat equity" for his labor.

To date, organized self-help housing projects have made only a minute contribution to the housing needs of low-income families. Of an estimated annual need of 600,000 units for low- and moderate-income sectors, organized self-help housing projects have produced slightly more than 1,000 units annually.[57] If the rate of self-help housing production in Venezuela, which has a population of 10,000,000, were applied to the United States on a comparable basis, the United States should produce 376,000 self-help units annually.

In quantitative terms one may conclude that housing needs for low- and moderate-income families have greatly exceeded housing production for these families, and organized self-help projects have done little more than demonstrate the effectiveness of this method of production.

For subsidized housing in the United States, self-help methods offer benefits to the government as well as to the participant. The government benefits because less subsidy is required for a given housing unit. The participant

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[57] Ibid., pp. 121, 122.

benefits by acquiring a substantial equity position in the property.

It is important to consider the long term costs, as well as the short term costs, involved in providing housing for low-income families. Short term costs may be thought of in terms of what it costs to get the house built. Long term costs include the short term costs in addition to the costs associated with living in the house--taxes, insurance, utilities, maintenance and repair, etc.--and government subsidies.

In the short term, self-help housing costs are usually lower than housing costs of commercially-built houses. This is true even when technical assistance and government administration costs are included for the self-help house.

It is in the long term where the greater efficiency of self-help methods becomes substantial. Since housing for low-income families is largely subsidized through lower mortgage payments (government pays part of interest costs), the smaller mortgages on self-help houses significantly lowers the amount of monthly mortgage subsidy required from the government.[58]

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[58]Self-Help Housing in the U.S.A.: A Preliminary Report, pp. 55-63. This section contains a comparison of

The fact that self-help houses require lower subsidy costs means that, with a given amount of subsidy, the government could reach a larger number of families by using self-help methods. The advantage to the participant receiving a mortgage subsidy is in terms of equity value rather than lower monthly payments. By contributing labor, the participant receives a house which usually has a market value higher than the mortgage. The difference is the participant's equity for which he has not incurred a cash cost.

Many families could not afford new housing if it were contractor-built, even with the subsidized interest rates. However, if the interest subsidy were combined with self-help construction, a larger percentage of the low-income population could be reached.[59] Over the long term, the lower subsidy cost per housing unit would be substantial.

The cost differences between a contractor-built house and a self-help house are revealed in Table 1.

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costs for contractor-built housing, public housing, and self-help housing.

[59]Building Systems Development, Inc., Large-Scale Self-Help Housing Methods, Report No. 4: Summary (San Francisco, June, 1970).

TABLE 1[1]

COMPARISON OF CONTRACTOR BUILT HOUSE AND SHE SELF-HELP HOUSE
SAN JOAQUIN, CALIFORNIA, 1970
(Case 1)

	Description	Contractor Built	Self-Help Built
1.	Total loan	$16,500.00	$10,720.00
2.	Full monthly mortgage payments[2]	147.65	104.34
3.	20% of monthly adjusted family income[3]	60.50	60.50
4.	Monthly subsidy formula 1 (line 2-3)	87.15	43.84

[1]The costs for the self-help house were approximations based on the urban experience of SHE. The contractor-built house costs were based on the maximum allowable, $16,500, under HUD/FHA guidelines in that area. The contractor house typically had more amenities and the self-help house was larger. The family's annual adjusted income was based on two adults and five children, the average family size for the SHE project.

[2]Full monthly mortgage payment includes principal, interest (7½%), mortgage insurance premium (½%), taxes and hazard insurance.

[3]Based on annual adjusted family income of $3,630 ($5,400 gross, less 5 percent, less 5 x $300).

TABLE 1--(Continued)

	Description	Contractor Built	Self-Help Built
5.	Principal + interest (7½%) + mortgage insurance premium (½%)	$ 122.65	$ 79.34
6.	Principal + interest (1%)	53.13	34.45
7.	Monthly subsidy formula II (line 5-6)	69.52	44.89
8.	Monthly government subsidy (lower of line 4 or 7)	69.52	43.84
9.	Families' monthly payment (line 2-8)[5]	78.13	60.50
10.	Total interest subsidy over 30 years	25,027.20	15,782.40
11.	Interest subsidy paid first 9 years	7,508.16	4,734.72
12.	Maximum technical assistance subsidy for self-help house	--	2,500.00
13.	Total subsidy for 9 years	7,508.16	7,234.72
14.	Total subsidy for 30 years	25,027.20	18,282.40

Source: Self-Help Enterprises, Inc., "Project Report No. 15" (Vasalia, California: Self-Help Enterprises, Inc., March 1, 1970-February 28, 1971), p. 4.

[4]Excludes hazard insurance and taxes from full monthly mortgage payment.

[5]Includes cost of hazard insurance and taxes.

A family with the income shown in Table 1 (Case 1) could not have qualified for the contractor-built house because its income was too low. Twenty percent of the family's monthly adjusted income (line 3) was substantially less than the monthly payment required for the contractor-built house (line 9). Without the self-help housing project, a family with this level of income could not have participated in any housing project. Mr. George Romney, past Secretary of HUD, once estimated that one-half the families in the U.S. could not afford a commercially-built new home.

It is to be emphasized that the family in Case 1, with a gross income of $3,630, was not able to qualify for the contractor-built house. Families with income this low cannot be reached by present low-income home ownership programs unless they are self-help.

There are also advantages to the government when self-help is used for housing low-income families, even when the family's income is high enough for it to buy contractor-built houses. If the family's gross income amount to as much as $6,790 per year, it could buy the contractor-house described earlier. But because the self-help house cost

$5,780 less than the contractor-built house, the interest subsidy cost to the government for the self-help house was considerably lower. This is the case presented as Case 2 in Table 2 The family's income is just high enough for it to be able to qualify for a contractor-built house under the FHA 235 program.

It is to be noted that the monthly payment by the participant in this case would be the same whether he bought the contractor-built house or built the self-help house. The entire benefit of a lower house payment would go to the government. In this case, the total cost of the federal subsidy over the 30-year period would be more than twice as much for the contractor-built house ($23,450) as the self-help house, including technical assistance ($10,359). The $2,500 technical assistance would have been amortized in less than five years.

Although the participant does not benefit from a lower monthly payment because he used self-help methods, he does ordinarily receive a substantial equity at no cash cost. Since the participant helped build the house, he has incurred a labor cost but no cash cost. The labor cost is

TABLE 2

COMPARISON OF MONTHLY COST BETWEEN CONTRACTOR BUILT HOUSE AND SHE SELF-HELP BUILT HOUSE
(Case 2)

Type of House	Total Monthly Payment	Amount of Government Interest Subsidy	Amount of Participant's Monthly Base Payment
Contractor built house	$147.65[1]	$65.14[3]	$82.51[3]
Self-help built house	104.34[2]	21.83[3]	82.51[3]
Difference	$ 43.31	$43.31	$ -0-

Source: Calculated from data In Self-Help Enterprises, Inc., "Project Report No. 15 (Visalia, California: Self-Help Enterprises, Inc., March 1, 1970-February 28, 1971), p. 4.

[1]Based on $16,500 FHA 7½ percent mortgage including mortgage insurance premium (½%) plus local taxes and hazard insurance.

[2]Based on $10,720 FHA 7½ percent mortgage including mortgage insurance premium (½%) plus local taxes and hazard insurance.

[3]Based on annual adjusted family income of $4,950 ($6,790 gross, less 5 percent, less 5 x $300).

offset by labor income in the form of equity value. Both of these are "in kind."

It is to be noted that the equity is determined by the difference between the market value of the house and the amount of the mortgage. The location of the house and the economic conditions of the community may have as much importance on the market value of the house, and the value of the owner's equity, as the number of hours that the participant contributed to its construction. On the other hand, if the participant could not have found employment for his labor otherwise, his labor did not have a market value and therefore his labor costs were irrelevant.

From the two cases above, one finds that:

a. the self-help method can reach more lower-income families than can the contractor method (Case 1);

b. there is no immediate advantages to the fully subsidized participant in holding down costs by building a self-help house since his monthly payment would be the same (Case 2);

c. technical assistance grants by the government for self-help housing projects can be amortized in only a few years (Case 1, 1);

d. for the interest subsidy paid by the government

for a contractor-built house, at least two self-help houses could be subsidized (Case 2).

Self-help housing has also made a contribution toward the attainment of less quantitative objectives. The President's Commission on Urban Housing cautioned that low- and moderate-income housing programs and projects should not make the participants prisoners in huge projects or concentrate and segregate poor families into neighborhoods of failure.[60]

The President's Commission on Urban Housing recommended that these families should be able to choose the location of their new home, the type tenure, and have the houses built on scattered sites mixed into the community.[61]

Self-help housing projects in the United States have emphasized these goals. The participants are involved from the beginning in the decisions regarding building sites, materials and house designs. The self-help housing projects have not concentrated families into public housing ghettos. Instead of tract building the houses, many of the self-help projects locate them on scattered sites around the community

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[60] Self-Help Housing in the U.S.A.: A Preliminary Report, p. 124.

[61] Ibid.

and in the country. There is no other low-income housing program in the United States that offers as much freedom for the participants.

The opportunity to create the product and thereby improve the possibility of consumer satisfaction is an important advantage for the families in self-help housing projects. In the book Freedom to Build Grindley concluded,

> In contrast to the owner-builder, who can make so many fine adjustments as he goes along and who is almost bound to get a comprehensive education in housing as he grows into the network, the home-buyer must either take the product offered him, or leave it. As a rule the home buyer enters the planning and construction cycle at such a late stage that most of the decisions affecting the life cost of the house will already have been made.[62]

This is a point that will be emphasized in this thesis: even though self-help participants represent low-income families and many of them are unfamiliar with construction processes, because they are involved from the beginning of the housing process (i.e., even before the plans are selected or construction begun) they have an opportunity to cut not only costs but also to make design changes in the house so that they have an opportunity to contribute to the process.

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[62] Freedom to Build, p. 20.

This is an important point because it adds to the consumer satisfaction of the final product.

Some might question whether consumer satisfaction should be allowed much importance in relation to the enormous unmet housing needs of the poor. It might appear that the public interest would be better served by federal support of large developers rather than projects using self-help techniques. But as Grindley so ably explains, the contributions of time, labor and talent individuals are willing to expend building their own houses ". . . are no burden on the society at large . . . the opportunity costs to the public sector of utilizing the administrative and construction labor talents of the owner-builder are zero."[63]

It is easy to think of self-help housing only in terms of small scale projects with limited objectives because this has been the main experience in the U.S. But as was pointed out in the previous chapter, self-help housing methods can be joined with large-scale building technology to produce housing in large volume.

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[63] Ibid., p. 6. The reference was to the process of independent self-help which does not require any technical assistance but the concept would appear applicable to organized self-help as well.

Building Systems Development, Inc. (BSD), has stated that efforts to attain national housing goals have ignored ". . . one important resource, the self-help builder."[64] BSD suggested that, with proper organization and implementation, large scale methods could be adapted to self-help methods. The program would not only make decent housing available to lower-income families but could eventually become self-supporting. Ultimately, such a program could account for 20 percent of all housing starts.[65]

Of course, the above statistic was based upon housing starts under present conditions. It does not emphasize housing needs of low-income families. If large scale self-help housing methods were used to accomplish the ten-year goal of 6,000,000 subsidized units, a large objective would be established. Based on production during 1969-1972 about one-half the subsidized housing starts were one to four family units. If large scale self-help methods were used to build these 3,000,000 units, $3 billion in technical assistance funds would be required (assuming $1,000 per unit technical

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[64] Large Scale Self-Help Housing Methods, Report No. 4, p. 2.

[65] Ibid.

assistance funding under large scale conditions), or $300 million annually.

For a housing program, $300 million is a modest sum. It is suggested that this would be the total technical assistance funding required to produce 300,000 housing units using large scale self-help methods. For comparison, this technical assistance figure is considerably less than the $358 million in military sales provided by the United States to Germany in 1971.[66]

Findings and Recommendations

Urban housing programs for low-income families have been inadequate relative to the housing needs of these families. The Department of Housing and Urban Development has failed to adequately support self-help housing activities for low-income families, although they have been willing to support private large scale developers.

The Department of Agriculture's Farmers Home Administration has been more concerned about mortgage loan repayment ability of rural low-income families than their housing needs. As a result, many rural low-income

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[66]U.S. Bureau of the Census, Statistical Abstract of the United States: 1972 (93d edition), Washington, D.C., p. 252.

families have not been able to participate in housing programs.

Many families live in areas that are not served by either housing agency, FHA or FmHA, because of population limits imposed on the agencies.

Due to conservative policies and bureaucratic procedures, FmHA has not granted all the technical assistance funds that have been available to them through appropriations from Congress.

The BRL project demonstrated how self-help housing could be used to get urban low-income families out of poverty. The housing process was a vehicle for social change.

The SHE project presented a demonstration of how self-help housing methods could be extended into a well developed building system, emphasizing prefabricated components, construction skills training, mass production techniques, etc.

The public costs for mortgage interest subsidies are considerably lower for self-help housing than for contractor-built housing or public housing.

Unlike other housing programs for low-income families, the self-help housing participant usually receives a substantial equity in his house at no cash cost.

By being involved in the housing process from the beginning, the self-help participant is more likely to enjoy greater consumer satisfaction in his house than the conventional house buyer.

Our housing goals for subsidized single family housing could be met for a relatively modest sum by combining self-help housing methods with prefabricated building components.

A study of self-help housing by HUD found:

> . . . that self-help methods, properly applied, increase housing production, decrease costs to the user and to the public, and contribute to the elimination of the symptoms and causes of poverty.

PART II

FIELD STUDY OF SELF-HELP HOUSING PROJECTS

IN OKLAHOMA

Although it is rewarding to survey the literature for experiences that overseas and United States areas have had in self-help housing, it would probably be more revealing and fruitful to study, at first hand, examples of the application of the self-help housing technique as exemplified in three such projects in Oklahoma. The decision to conduct a field study of three self-help housing projects in Oklahoma was made in order to find out whether self-help housing, as a technique, was a feasible method to provide low-cost homes to low-income families in rural areas. The methods of the field study are described in Chapter IV. The results and analysis of background material and interviews conducted of project personnel are presented in Chapter V. The results and analysis of interview data secured from the participants of the three projects are presented in Chapter VI.

Chapter VII is the final and concluding chapter of the study and presents the overall findings and conclusions.

CHAPTER IV

METHOD OF STUDY

Introduction

Considering the urgent need for low-cost housing for low-income families both overseas and in the United States, any kind of research directed toward the solution of this problem would be welcome. In fact, several solutions have been presented and tried. One solution to the housing problem is massive financial assistance by governments. Another possible solution is independent or self-help (owner-built) housing. Self-help housing has, in fact, been experimented with in a number of countries, including the United States. There also exists in Oklahoma three examples of organized self-help housing that lend themselves as models worthy of a research investigation of a field survey type in order that the experiences in such projects might be systematically studied and the lessons learned from such a study shared with anyone concerned with the housing needs of mankind.

A careful exploration of several considerations led to the decision to conduct a field study of the Oklahoma organized self-help housing projects. Objectives of the field study were first, to emphasize the urgent need to provide housing for low-income families; second, to find a means to provide such housing that is feasible in terms of time and resources; third, to insure that such a solution would contribute to the socio-economic improvement of the participants; fourth, to use a demonstration experience involving the solution that could be investigated and analyzed; fifth, to keep the investigation modest in terms of financial expenditures and personnel; sixth, to conduct the investigation in a reasonably short period; seventh, to list findings of the investigation that would provide lessons for policy makers involved in determining housing needs of low-income families. A careful review of the preceding considerations resulted in the decision to conduct a field study of organized self-help housing projects in Oklahoma. It was believed that such a study was necessary, practical, and worthwhile for the purposes of a doctoral dissertation. Thus, a prospectus was prepared, submitted and approved.

The Field Study

The field study is based on an understanding of certain concepts: self-help housing concept, organized self-help housing projects; "rural areas" as defined by various government agencies, and the condition of housing for low-income families living in rural areas. These terms and concepts are defined. (Several additional terms used in this study are defined in the appendix.)[1]

Definition of Terms

Self-help housing concept.--Generally, the concept of self-help housing involves participation by an individual in any or all phases of the building process regarding his own dwelling. The primary objective of the personal involvement is to reduce the amount of external assistance required for completion of the housing process. Theoretically the self-help concept means that an individual undertakes to provide independently for his own shelter. In reality, self-help usually becomes a compromise. The individual accepts some kind of external assistance, however minimal, in the

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[1]See Appendix B.

building of his own dwelling. This type of self-help is referred to as organized or aided self-help.

Oklahoma organized self-help housing projects.--The type of self-help nearest to the projects included in this field study is organized self-help, characterized as being

> . . . sponsored or supervised or supported, or all three, by parties other than the participant. Most important, the participant does not initiate the effort beyond making the decision to join a program or project.[2]

Organized self-help housing project sponsor.--The sponsor is an important feature of organized self-help. The sponsor is responsible for organizing and administering the construction of houses for the participating families and may perform the following tasks:

> . . . selection of participants, pre-construction training of participants, arrangement of financing for participants' mortgages, land acquisition and development, design of houses and construction schedule, delegation of subcontracts, construction supervision, and arrangement of title transfer to participants after occupancy of housing.[3]

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[2]The Organization for Social and Technical Innovation, Self-Help Housing in the U.S.A.: A Preliminary Report, presented to the United States, Department of Housing and Urban Development (Massachusetts: The Organization for Social and Technical Innovation, June, 1969), p. 10.

[3]Ibid., pp. 10, 11.

Technical assistance funding.--The sponsor receives financial support in the form of technical assistance. For the organized self-help projects in the state of Oklahoma, technical assistance has been funded by the Office of Economic Opportunity (OEO) and the Farmers Home Administration (FmHA). The applicant organization for technical assistance must show three things: a need for self-help housing clearly exists in the area; personnel can be hired to carry out successfully a technical assistance program; and funds are not available from other sources to provide these services.

The technical assistance funds may be used to pay necessary office and administrative expenses, lease or purchase essential equipment and tools, and to pay fees for training self-help participants in construction techniques or in other needed professional services. The technical assistance funds cannot be used for the payment of materials or labor.

Rural areas.--Rural areas, as used in this study, will be defined in terms of service areas of the Farmers Home Administration, i.e., open country or any town or city which is rural in character and whose population does not exceed 10,000. The term "rural areas" is defined in different ways

by various agencies of the federal government which are responsible for collecting data and/or implementing housing programs in these areas. The Federal Housing Administration (FHA) does not attempt to define rural areas, but in general FHA does not serve areas where the population is less than 25,000. These definitions leave many poorly-housed families uncovered by either housing agency. As a result of the lack of uniformity in definition, there are almost one million citizens living in bad housing who are ineligible to participate in an FmHA of FHA program because they either reside in an area which cannot be served by Farmers Home Administration, since the population exceeds 10,000, or the population has not yet reached 25,000 and therefore they cannot receive assistance from the Federal Housing Administration.[4]

Condition of housing in rural areas.--Only 32 percent of the occupied units in the United States were located in rural areas eligible for Farmers Home Administration housing programs in 1970, but these rural areas accounted for 68 percent of the occupied units lacking complete plumbing

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[4]U.S. Congress, Senate, Select Committee on Nutrition, Promises to Keep: Housing and Federal Failure in Rural America, 92d Cong., 2d sess. (Washington, D.C.: Government Printing Office, April, 1972), p. 3.

facilities. The South accounted for 65 percent of the substandard units. One of five houses occupied by blacks in 1970 was located in FmHA areas which,

> . . . contained 68 percent of the black housing units that lacked complete plumbing, 29 percent that were crowded, and 42 percent that were either crowded and/or lacked complete plumbing.[5]

Blacks occupied only six percent of all units in FmHA areas in 1970, but they accounted for 28 percent of the FmHA area units that lacked complete plumbing.[6]

The meaning of the above statistics is explained in the following statement by Richard J. Margolis, Chairman, Rural Housing Alliance:

> Clearly, we as a Nation have promises to keep, and . . . time is running out. Today, as a direct consequence of massive indifference on the part of our Government, we face a full-scale housing famine in rural America. This famine--this daily hunger for housing--is as painful and as destructive of human life as hunger for food would be. We will be discussing an emergency of truly monstrous proportions. If all of our 50 states were simultaneously struck by hurricanes, the resulting emergency - the deaths, the destruction, the shortages of water and sanitation, and shelter - would be no greater than the emergency

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[5]U.S. Department of Agriculture, Economic Research Service, Housing Conditions in Areas Served by Farmers Home Administration Housing Programs, 1970, by States, Statistical Bulletin, No. 492 (Washington, D.C.: Government Printing Office, September, 1972), p. i.

[6]Ibid., p. ii.

we now confront in rural America. But rural America has never been declared a disaster area.[7]

Selection of Sites

A major task of any field study is the choice of sites for investigation. Certain considerations were involved in the choice of the sites for this field study. The major considerations were that there were three organized self-help housing projects located in Oklahoma; the Oklahoma self-help housing projects were in operation with their records, personnel, and participants available for investigation; the Oklahoma projects offered a variety of experiences relating to source of technical assistance funds, organization of families, methods of construction, and so forth; and the Oklahoma projects involved participants with different ethnic origins and skill levels.

Construction of Questionnaire

A copy of the questionnaire used in this study can be found in the appendix.[8] Together with information obtained from project records, interviews with project and FmHA

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[7] Promises to Keep, p. 3.

[8] See Appendix C.

personnel, it was expected that responses to the questionnaire would help to differentiate among the three housing projects. The questionnaire was designed to gather information regarding family characteristics of the self-help housing participants; to determine how much difference existed between the previous dwelling and the self-help house, and to help understand the participant's evaluation of the project, the quality of the house, and personal estimate of the costs and benefits from having participated in the program.

The questionnaire was kept as simple as possible. Familiar, rather than technical, terms were used. The writer visited each participant under the most comfortable circumstances so that the participant would be more willing to express himself freely.

Many of the questions used in the questionnaire were based on similar surveys. The questions relating to kitchen, bathroom and plumbing facilities were much the same as those used in the 1970 Census of Housing. Some of the questions relating to household expenditures, major purchases, attitudes towards neighborhood environment, preconstruction and construction training, and so forth, are are similar to questions asked during surveys conducted

among participants in the Self-Help Enterprises, Inc., project.[9]

Questions asking for cost, value, age, and so forth, were in the form of a range. It was felt that the range would be specific enough for analytical purposes and would probably be as close as the respondent could recall.

The questionnaire was divided into four major sections: Prior House; Comparison of Prior House and Self-Help House; Self-Help Housing Program; Personal Questions about Head of the House.

The first section contained questions about the participant's prior house. The first question asked for the address or directions to the prior house so that the interviewer could locate, evaluate and substantiate the condition of the prior house by photographing it, if it were located in the project's area. If the participant had rented the house, the second question asked the amount of monthly rent and if any members of the participant's family worked for the landlord. In cases where the participant owned his prior house, the third question sought to determine

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[9]James D. Smith, "A First Report on the Characteristics of Self-Help Participants in the San Joaquin Valley," (Pennsylvania State University, n.d.).

its value at the time the participant moved. The remaining three questions in this section were designed to determine if the prior house was substandard, due to overcrowding or to the lack of plumbing facilities.

The second section of the questionnaire asked identical questions about the self-help house and the prior house. The purpose of these questions was to determine under what conditions each house was being used, the cost of shelter in each case, and the participant's attitude toward his present environment compared to his previous environment.

The third section of the questionnaire consisted of open-ended questions between two major areas. The first area asked questions regarding the participant's experience in the pre-construction and construction phases of the project. The second area attempted to determine how well the participant understood his responsibilities and privileges under the FmHA mortgage and his attitude toward the fairness and efficiency of the self-help housing program.

The final section of the questionnaire asked personal questions about the head of the household. The purpose of these questions was to determine if there were limits with respect to skill-levels, health, education, income, or age of household heads which should be imposed on self-help

applicants. The participant was questioned in an effort to determine if the self-help experience was instrumental in helping him to find his present job. The fifth and sixth questions sought to determine how important home ownership had become to the self-help participants.

At the end of the interview, the participant was asked the amount of his mortgage, monthly payments, interest rate, and whether or not the monthly payments had changed since his loan had been approved.

Collection of Data

For the purpose of collecting the data for the field study, two types of interviews were planned. First, interviews were planned with personnel involved in the tasks of construction management and administration of the projects. Second, interviews were planned with the participants of the projects. All in all, it was planned to collect two sets of data from two distinct groups: the project administrators and supervisors and the ultimate consumers, i.e., the self-help housing participants.

From the project personnel, it was expected that information regarding method of selecting participants, type of pre-construction training conducted, location of houses,

floor plans, sources of building materials, relationship with OEO and FmHA, etc., would be useful.

The second phase of the field study involved interviewing the self-help housing participants. It was expected that the participants would provide information as to their satisfaction with the administration of the project, design and construction of the houses, other participants, and so forth.

Conducting the Field Study

The writer's initial interest in self-help housing resulted from publications of the Rural Housing Alliance which explained the concept and history of the program and from discussions with Dr. W. N. Peach, a participant in the First Rural Housing Conference, who pointed to the need for more and better housing for low-income families in rural areas. Further interest in self-help housing developed when it was discovered that Oklahoma had three such projects.

As soon as arrangements could be made, one of the Oklahoma self-help projects was visited. The coordinator of the project drove around the county pointing out the houses that had been built and introducing some of the families who had built them. The quality of construction of the houses

and the substantial saving made possible by the self-help housing process were impressive.

Since the Farmers Home Administration provides the mortgage loan funds for the Oklahoma projects, their state office in Stillwater, Oklahoma, was visited. Two of the three self-help housing projects in Oklahoma were sponsored by local rural electric cooperatives. The Oklahoma Rural Electric Cooperative Association in Oklahoma City was visited to find out why Oklahoma rural electric cooperatives were interested in sponsoring self-help housing projects.

Later the other two self-help housing projects in Oklahoma were visited and discussions were held with their personnel and many of the participating families.

Since there is a history of self-help housing projects abroad as well as in other areas of the United States, a trip to Washington, D.C. was planned. In preparation for the trip, a participant questionnaire was prepared and mailed to each of the three self-help housing project directors for their review and comments. A proposal was prepared for the thesis. Later, the corrected proposal and a detailed outline were discussed with Dr. Peach who agreed to be the thesis supervisor.

Interviews were conducted in Washington, D.C. with officers of the Farmers Home Administration, Rural Housing Alliance, Office of Economic Opportunity, National Rural Electric Cooperative Association, and the Department of Housing and Urban Development. The purpose of visiting the offices was to discuss the proposed thesis with the appropriate office, to learn the names of experienced people in self-help housing, to determine the extent of the program in the United States and overseas, and to locate pertinent background materials.

The reception of the officials of the organizations visited in Washington, D.C. was warm and encouraging. Several of them had been involved in self-help housing activities and expressed interest in the study. They indicated an interest in the findings and thought the study would be feasible, relevant and worthwhile. Each of the organizations contributed materials and suggested other sources for materials not available from their offices.

A member of the staff of Self-Help Enterprises, Inc. (SHE) of Visalia, California, was contacted, and SHE mailed several reports and studies that applied to that project. The Centre for Housing, Building and Planning of the United Nations contributed a publication on setting up self-help

housing projects in less developed countries. After the materials and interviews had been reviewed, another draft of the questionnaire was completed.

Several copies of the questionnaire were prepared and taken to the KECAHC project in Wilburton, Oklahoma. The director of the KECAHC project assisted in locating the self-help housing households on a map. A pilot survey was made of several participants in the KECAHC project. From earlier conversations with the director of the KECAHC project, it was understood that the participants had attended pre-construction meetings during which instruction relating to the use of building tools, reading blue prints, family budgeting, etc., was given. After several participants in the KECAHC project had been interviewed, it was obvious that about half the participants in this project had not attended such meetings since they did not belong to a mutual-help housing association. These participants had used individual self-help methods to build their houses.

After the changes were made in the questionnaire, the remaining participants in the KECAHC project were interviewed, followed by interviews of participants in the CHI and SOCAG projects.

As shown in Table 3 none of the participants refused to be interviewed. A total of 83 self-help houses was completed, or in the process of construction, among the three self-help housing projects in Oklahoma as of December 31, 1972. The interviewed conducted represented 87 percent of the total self-help housing participant population in Oklahoma. The 11 participants not interviewed had moved from the area or were not home on any of the numerous occasions interviews were attempted.

The writer personally interviewed the self-help housing participants in the three Oklahoma projects for several reasons. First, the three projects were located in only six counties in Oklahoma, and although the six counties are not all contiguous, four of the counties in the southwestern part of the state are in the same proximity. Second, since English was not the native language for some of the participants, many participants would find a mailed questionnaire difficult to complete. Third, some of the questions asked for an evaluation of the self-help housing project and its personnel, and it would not have been appropriate to request project personnel to administer the questionnaire.

TABLE 3

SIZE OF THE SURVEY OF THREE SELF-HELP HOUSING PROJECTS
IN OKLAHOMA
DECEMBER 31, 1972

Description	CHI[1]	KECAHC[2]	SOCAG[3]	Total
Houses completed	39	18	12	69
Houses in process of construction	0	8	7	15
Total	39	26	19	84
Participants not interviewed:				
Moved from project area	(5)	(2)	-	(7)
Not at home	-	(4)	-	(4)
Participants interviewed	34	20	19	73

Source: Field notes.

[1]CHI - Caddo Homes, Inc.

[2]KECAHC - Kiamichi Electric Cooperative Area Housing Committee, Inc.

[3]SOCAG - Southwest Oklahoma Community Action Group, Inc.

Finally, by being in the participant's house, the writer gained information through observation.

At the beginning of the interview, the interviewer assured the participant that information would be confidential. For purpose of analysis, each questionnaire was dated and coded with a series of letters which identified the self-help project, the town nearest the participant's self-help house, and the participant. Although each participant could refuse to answer any questions if he chose, only one participant elected to leave unanswered the question on range of income.

Most interviews were conducted between November 23, 1972, and December 29, 1972. Subsequent interviews with those who had houses under construction at the time of the initial interview were conducted during the late spring of 1973.

It was considered important to interview both husband and wife, if possible. For this reason, most of the interviews were conducted in the evening, on the weekends, or on holidays.

A female was the head of six of the families interviewed (Table 4). Of the remaining 67 families, most

TABLE 4

SEX OF HOUSEHOLD HEAD AND PERSONS INTERVIEWED IN THREE SELF-HELP HOUSING PROJECTS IN OKLAHOMA, NOVEMBER-DECEMBER, 1972

Description	CHI[1]	KECAHC[2]	SOCAG[3]	Total
Interviews conducted	34	20	19	73
Households with only female head	(3)	(2)	(1)	(6)
Household with only male head	(1)	-	-	(1)
Households with husband & wife	30	18	18	66
Only wife interviewed	(8)	(2)	(6)	(16)
Only husband interviewed	-	(2)	(3)	(5)
Only adult children interviewed	(3)	-	-	(3)
Interviews with both husband & wife	19	14	9	42

Source: Field notes.

[1]CHI - Caddo Homes, Inc.

[2]KECAHC - Kiamichi Electric Cooperative Area Housing Committee, Inc.

[3]SOCAG - Southwest Oklahoma Community Action Group, Inc.

of the interviews were conducted with both the husband and wife present. In the three households where the interview was conducted with adult children, two of the children had been married and were living at home. One of the children was enrolled in college but visiting home at the time of the interview. In all cases the children had lived at home while the self-help house was being constructed and had participated in the construction of the house.

There was a variety of ethnic backgrounds among the participants in the three self-help housing projects in Oklahoma. The questionnaire did not contain any questions regarding ethnic origin, but such information was considered important and reflects the writer's opinion, based on observation and conversations with the participants and the project personnel (Table 5). Generally, three-fifths of the participants were white; one-tenth were Indian; one-tenth were black; one-fifth were Mexican-American. The largest project, Caddo Homes, Inc., had the widest representation of participants with different ethnic origins.

TABLE 5

ETHNIC ORIGIN OF PARTICIPANTS IN THREE SELF-HELP HOUSING PROJECTS IN OKLAHOMA, NOVEMBER-DECEMBER, 1972

Description	CHI[1]	KECAHC[2]	SOCAG[3]	Total
Participants living in project area	34	22[4]	19	75[4]
White	23	20	3	46
Native-American (Indian)	6	2	0	8
Black	3	0	4	7
Mexican-American	2	0	12	14

Source: Field notes.

[1]CHI - Caddo Homes, Inc.

[2]KECAHC - Kiamichi Electric Cooperative Area Housing Committee, Inc.

[3]SOCAG - Southwest Oklahoma Community Action Group, Inc.

[4]Information regarding the ethnic origin of two participants not invertiewed (not home) was provided by self-help project personnel.

CHAPTER V

THE OKLAHOMA EXPERIENCE IN SELF-HELP HOUSING

Introduction

Oklahoma is no exception when it comes to the housing problem. Like any other country in the world, or like any other state in the Union, it has pressing housing needs. A housing study conducted in 1971 estimated that with Oklahoma's growing population an estimated 218,509 housing units would have to be constructed in the five-year period from 1970 to 1975.[1] This projected required housing estimate anticipated the housing construction necessary to meet expected population increases, replace presently existing dilapidated houses, replace or remodel aged houses (those over thirty years old), and to maintain an estimated vacancy rate.

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[1]The Oklahoma Economic Development Foundation, Inc., Oklahoma Housing: Facts--Problems--Opportunities, Vol. II: Population and Housing Needs and Projections, 1975-1980-1985 (Oklahoma: The Oklahoma Economic Development Foundation, Inc., June 30, 1971), p. 9.

To assist in meeting this housing need, three self-help housing projects were started in Oklahoma. It is not intended in this discussion to show that these projects did make serious impacts upon the housing needs of Oklahoma or that the ultimate solution to the housing problem resides solely in the use of self-help housing techniques. It should be pointed out that the investigation of these self-help housing projects rests on certain considerations. The self-help housing technique has been used in many countries in the world and in some places in the United States. The study of the use of self-help housing methods in Oklahoma may have some utility for some people who are interested in meeting the housingneeds for Oklahoma and other communities. The accessibility of these projects was a major consideration for the use of a field survey type of investigation. These projects have achieved a fairly successful experience in self-help housing so that they can be used as models for future projects.

The Oklahoma experience in self-help housing can be traced to three projects started in southwestern and southeastern Oklahoma. These projects were the Caddo Homes, Inc., located in southwestern Oklahoma; the Southwest Oklahoma Community Action Group, Inc., located in Greer and Harmon

Counties in southwestern Oklahoma; and the Kiamichi Electric Cooperative Area Housing Committe, Inc., located in Latimer and LeFlore Counties in southeastern Oklahoma. These three self-help housing projects were organized and operated independently of each other. Their experiences, however, furnish patterns that have some theoretical and practical utility toward understanding the concept of self-help housing.

Caddo Homes, Inc.

Introduction.--Caddo County is a predominantly rural community located in southwestern Oklahoma. Only Anadarko, the county seat, qualified as an urbanized area in the last U.S. census of 1970. In 1970 Caddo County had a population of 28,931 which, compared to its 1960 population of 22,322, was a substantial increase. The projected population estimate for 1975 indicates that Caddo County's population will be 31,456. There is no available record showing the condition of housing (whether sound, deteriorating, or dilapidated) in Caddo County for recent years, but there is some evidence of inadequate plumbing facilities and overcrowding, especially in the rural areas.

What is also significant to note is that in 1969 about one-fifth of the families in Caddo County had incomes

below the poverty level. Anadarko, the county seat, also had about one-fifth of its families with income below the poverty level. A majority of the low-income households lived in owner-occupied housing units with a mean value of less than $7,000. It is apparent, therefore, that additional housing units are needed for the growing population of Caddo County and that such additional housing units will be needed by households with incomes below the poverty level.

Formation of the project.--To meet some of the pressing housing needs for Caddo County, the Caddo Electric Cooperative, Inc., an organization that supplies electric power to homes in several southwestern Oklahoma counties, submitted several proposals to the Office of Economic Opportunity for the purpose of securing technical assistance funding for a housing project. These early proposals were rejected by the Office of Economic Opportunity. After persistent efforts by the Caddo Electric Cooperative, Inc., a proposal was submitted to the Office of Economic Opportunity through the Council on Community Concerns, a local project of the Office of Economic Opportunity. The Office of Economic Opportunity approved the application on June 17, 1966. The project got started with a group of five low-income families. Caddo Homes, Inc. (CHI), as the project was named,

was limited to building self-help houses in Caddo County only. By March, 1972, over two hundred people had participated in the project and 39 self-help homes had been constructed. It is important to note that most of these people had previously lived in some of the county's poorest houses.

Administration of the project.--The overall administration of the project was entrusted to Caddo Homes, Inc., an organized self-help housing project created by the Caddo Electric Cooperative, Inc., of Binger, Oklahoma. The project was also supervised to some extent by the Council on Community Concerns of Anadarko, Oklahoma, an Office of Economic Opportunity project. The participants of the project had to qualify by meeting certain eligibility requirements such as: not currently be owners of adequate housing; be unable to obtain credit for a mortgage loan from other sources; have the ability to repay the loan; not have an adjusted annual income in excess of $7,000; choose to locate their new house in Caddo County, a rural area. As soon as the participants qualified, they were expected to perform the following: purchase an approved building site; begin building site improvements and house construction; attend required project meetings; assist in the construction

of the house under the supervision and direction of the project's construction supervisor.

Operation of the project.--There are two significant aspects of the operation of the self-help housing project in Caddo County. First, there was the utilization of labor contributed by the participants. Second, there were several different types of houses constructed in the project. In the course of the operation of the project, decisions were made regarding the utilization of labor by the participants as well as the types of houses to be constructed.

The participants were originally expected to contribute labor on a group basis toward the construction of the houses.[2] The first group of five families contributed such group labor, even in excess of the number of manhours they had pledged to contribute. Later, as changes were made in the type of houses to be constructed, the number of hours contributed decreased. Among the reasons that contributed toward this change in the use of mutual-help labor were the following: it was considered expensive for the families to travel between building sites during the period of construction; time was wasted when construction of a new group of houses was delayed until all the participants had secured

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[2] See Appendix, p. 189.

building sites and loan funds; ill feelings often developed among the participants regarding the quantity and quality of the labor contributed; mutual-help associations conflicted (because they were slower) with the primary objective of the project which was to move the family into their new home as soon as possible at minimum cost. In the end, the participants worked only on their own homes (individual self-help) and did not contribute labor toward the construction of the other houses (mutual-help).

Construction of the houses.--In the short history of the project several types of houses were constructed. They are identified as prefabricated houses, factory built houses, and contracted stick-built houses.

The major components of the prefabricated houses were manufactured by National Homes, Inc., at their plant in Tyler, Texas, and shipped to the building sites in Caddo County. Before these components arrived, the participating families contributed labor toward clearing the building site, excavating the land for the foundation and septic tank system, pouring the foundation, and installing some plumbing. When the houses were erected, the participating families contributed labor toward painting the house, installing cabinets, trim, and doors; laying floor tile, installing

electrical wiring and fixtures, heaters, and sheetrock; and performing general housekeeping chores.

One difficulty was created through the use of prefabricated houses. When the house was delivered to the building site, several workers had to work continuously until it was "dried in;" that is, closed in from the weather. This meant that the families had to spend considerable time erecting the houses, and some participants had to take time off from their regular jobs.

The next type of house was the factory built house. Royal Homes Manufacturing, Inc., of Eakly, Oklahoma, in Caddo County, delivered a house to the building site after the participant had completed construction of the stem wall. Royal Homes hung the doors and put up wall paneling. Materials, except paint and carpet, were left in the house for the family to use. The family installed trim and cabinets, put up and painted exterior masonite siding, installed appliances, light fixtures, plumbing fixtures, and finished floors. The families needed little skill and required a minimum of supervision. The houses required about 212 man-hours to complete. The completed house had three bedrooms, one bath, and 1,152 square feet of living area. It cost

$6,195 but was comparable to a $10,000 house. All in all ten such Royal Homes were constructed.

Later it was decided to change to contracted stick-built homes. It was thought that stick building would be more flexible in terms of design and scheduling of work and could be more easily adapted to individual self-help.[3]

Some observations were made as a result of studying the changes in the types of houses constructed in the self-help housing project in Caddo County. There was little difference in the time it took to construct any type of house erected in the project.[4]

There was little cost difference between the three methods of construction after adjustments were made for price level changes. Construction costs, however, rose over the five-year period of construction by almost one-third.[5]

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[3]The contracted stick-built housing process enjoyed the advantages of the factory and prefabricated housing processes but without their design and scheduling constraints. After the loan funds were received the participant and project would contract with a builder to complete construction to a "dried in" stage. The participant was then able to do most ofhis "sweat equity" work protected from the weather. The project built 19 houses of this type.

[4]See Appendix, p. 190.

[5]See Appendix, p. 191.

The contracted stick construction method required the highest per unit technical assistance cost. Next was the prefabrication method. The contracted stick construction method had a higher technical assistance cost because the rate of house construction slowed when the project changed from factory houses.[6,7]

The factory method of construction provided the lowest average cost per unit. The factory houses had the lowest cost. The prefabricated houses had the highest cost.[8]

Summary

Caddo Housing, Inc., (CHI) was the first self-help housing project in the state of Oklahoma. This project assisted 39 low-income families in southwestern Oklahoma to build new homes.

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[6]See Appendix, pp. 192, 193.

[7]It is to be noted that the prefabricated houses constructed during this time had attached garages. The cost of the garage was included in the total cost of the house, but its size was not included in the living area of the house, thereby making the cost higher on a living area basis.

[8]See Appendix, p. 194.

Early in the operation of the project it was decided that the most important consideration should be to get the families into well-built houses as soon as possible at minimum cost. The project was flexible in its organization of families and construction methods. The project started with mutual-help associations using prefabricated houses. When it was determined that factory houses would be more efficient, CHI changed to that method. The project found that the participants preferred to work on an individual rather than group basis. Factory houses made this type labor organization feasible. Later it was determined that "user needs" could receive greater consideration if the houses were built using contracted stick-built construction methods. On an adjusted basis, the CHI project built larger houses at the end of the project for less cost than they had four years earlier.

Southwest Oklahoma Community Action Group, Inc.

Introduction.--The Southwest Oklahoma Community Action Group, Inc., self-help housing project (SOCAG) constructed houses in Greer and Harmon Counties in southwestern Oklahoma.

Both Greer and Harmon Counties are much smaller than Caddo County. The populations of both counties have declined

in recent years. In each county there was one place that qualified as an urban area with a population of more than 2,500: Mangum, the county seat of Greer County; and Hollis, the county seat of Harmon County.

Most of the poor and inadequate housing in Greer and Harmon Counties are located in the rural areas. The 1960 Census revealed that almost one-third of the housing units in Greer County, and slightly less than half the housing units in Harmon County were deteriorated or dilapidated. In the 1970 Census, one-tenth of the housing units in Greer County and one-sixth of the housing units in Harmon County were overcrowded or had inadequate plumbing facilities.

All but a small percentage of the housing units in both counties were valued at less than $15,000 in 1970. The median value in Greer County was $6,700 and in Harmon County it was $8,200. The monthly contract rent was less than $60 in more than three-fourths of the renter-occupied units for both counties. The median rent in Greer County was $39 and in Harmon County it was $38. Slightly less than one-fourth of the families in each county had income below the poverty-level. Most of the poverty-level families in both counties lived in owner-occupied houses.

Formation of the project.--In the spring of 1968, the Community Action Program agency office in Altus received its first self-help housing technical assistance grant. This grant was made available to the Southwest Oklahoma Community Action Group, Inc., which had a program that was aimed at meeting the housing needs of migrant and other seasonally employed agricultural families. This program was described as:

> . . . much more than the simple construction of houses. It means that the participant families must learn to work together for their mutual benefit. Some are more apt at construction work than others and must carry the burden of the weak members. Thus it is a lesson in cooperation for mutual betterment. The sweat and sacrifices of all free time used for construction of the houses will result in the families taking pride in their homes and having a "stake" in their community. It means that each participant family will receive a larger house than possible through any other method and at a very low rate of interest with low monthly payments. No other method of housing could provide so much.[9]

Operation of the project.--The SOCAG project was most similar in objectives and procedures to the Self-Help Enterprises, Inc., (SHE) in Visalia, California. Like SHE, the SOCAG project was founded to improve the migrant farm worker's

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[9]Application for Community Action Program, "Program Accounting Work Program" to the Office of Economic Opportunity from Southwest Oklahoma Community Action Group, Inc., n.d., p. 11.

vocational and social skills as well as to provide more decent housing for him. The project used only mutual-help construction methods.

The nineteen families involved in the project were divided into three mutual-help housing associations: Golden Rule Homes Association; Mangum Self-Help Housing Association; and Dream Homes Association.[10]

Each association was a separate entity with its own officers and rules. Each participant was responsible to his respective association for a required number of man-hours. A promissory note was signed by husband and wife. The membership agreement provided for an equal exchange of labor hours among the participants and, if either husband or wife died, the other members of the association agreed to complete the house. The minimum age acceptable for labor exchange purposes was 16 years. A labor manager, who kept records of the man-hours accrued by members of the association, was elected shortly after construction began.

The membership agreements stated that the associations could stop work on a given house under the following conditions and not continue until delinquent members met the requirements:

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[10]See Appendix, p. 195.

a. If a family fell behind other members of the association by 30 hours;

b. If a family lagged 60 hours behind other members of the association, the construction supervisor would not order materials for their house nor provide supervision;

c. If a family got 90 hours behind other members of the association, the family agreed to sign the necessary papers so that their house could be transferred to a new family.[11]

The participant's time with the project was divided between two major activities: pre-construction, about five months; and construction, approximately 10 months. Pre-construction consisted of attending community meetings; submitting a FmHA application; organizing into a mutual-help association; submitting house plans, options on building sites and cost estimates to FmHA; attending weekly meetings where outside speakers explained taxes, insurance, interest, landscaping, house maintenance, improvements, and so forth. Construction consisted of laying out the house; digging and pouring the foundation; raising the exterior walls; putting

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[11]Southwest Oklahoma Community Action Group, Inc., "Membership Agreement" form, pp. 3, 4.

the roof into place; "drying-in" the house; completing the rough-in inspection; priming and sealing the exterior walls; completing the plumbing; painting the interior and exterior; laying floor tile; having final inspection, and moving into the house.

The Golden Rule Homes Association was the first SOCAG mutual-help housing group. This association was formed in April, 1969 and was composed of five Mexican-American and three black families in Harmon County. The Harmon County FmHA office rejected the application of one black family headed by a female because it did not think that her children were old enough for her family to do the required work. SOCAG responded to FmHA by reminding them that this was a mutual-help project and that the other families in the Golden Rule Homes Association had agreed that all homes in the association would be completed at the same time. Fortunately, FmHA agreed to allow this family to participate, and their new six room house was completed along with the other houses in the association. The female participant and her relatives and friends contributed their share of the labor exchange agreement.

From the time SOCAG received its technical assistance funding from OEO, it took almost three years for the first

eight families to complete their houses.[12] Citizens in Hollis put pressure on the Harmon County FmHA supervisor to reject the applications of the three black and three Mexican-American applicants. (Two families built in Gould.) The families found it difficult to obtain options on building sites and to buy land cheaply enough to be approved by FmHA. Finally, the families were allowed to build their homes. The Golden Rule families spent approximately $75,000 on sites, construction materials and improvements, and this flow of money into the county helped to later pave the way for consideration of public housing in Hollis.

The second mutual-help housing group was formed in Greer County and was supposed to have about eight families. Home interviews were conducted with families in Greer County in early 1970 and applications submitted to FmHA. Most of the applications were rejected and some were resubmitted. It was a year later before three families formed the Mangum Selp-Help Housing Association. (It was reported that FmHA purposely delayed approving the applications so that the families would get discouraged and quit.) Construction of the three houses began in July, 1971. When a fourth family

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[12]See Appendix, p. 196.

in Mangum joined the association in August, the first three families had to stop construction on their houses until they had the fourth house completed to the same stage. By June, 1972 all four houses were completed.

The third association SOCAG organized was Dream Homes. This association had seven members whose application had already been approved by FmHA. Their loans were closed in January, 1972 and some construction began. Since the construction supervisor spent most of his time in Mangum until May, this group was not able to make much progress on their houses until the summer of 1972. The last OEO technical assistance grant, which included a $5,000 land fund, was made in the late summer of 1972 to carry the project through the end of the year. The houses were not completed by the end of 1972, even though all technical assistance had been expended. Funds from other sources were used to continue paying the construction supervisor for the first two months in 1973 until the houses were 95 percent complete. The families were allowed to work individually on their houses until they were sufficiently complete to move into.

In August, 1971 a construction training program was begun. Five trainees worked with the construction supervisor during the day on the participant's houses. The use of the

trainees reduced the labor contribution required of the self-help participants in the second and third groups.[13] The Dream Homes Association members were not able to use the trainees as much as the Mangum Self-Help Housing Association, and their average labor contribution was larger.

Construction of the houses.--All the participants in the SOCAG project built their houses using stick construction methods. Both the application periods and construction periods for this project were substantially longer than the CHI project.[14] Compared to CHI, the application period for SOCAG was a third longer. The construction period was more than three times as long.

The adjusted cost[15] of the SOCAG houses decreased seven percent by the end of the project. The average construction cost of the houses built by the Dream Homes Association was 11 percent higher than those built by the Golden Rule Homes Association, but building costs had risen 19 percent during this period, causing a net decrease in adjusted cost.

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[13] See Appendix, p. 195.

[14] See Appendix, pp. 190, 196.

[15] Adjusted for the rise in the price of materials. See Appendix, p. 197.

The slower construction methods used by SOCAG contributed to high average technical assistance cost.[16] The rate of house production in the SOCAG project was slightly more than one-half the rate established by the CHI project. The SOCAG project built 19 houses in 57 months of technical assistance funding. The average cost per unit for the houses in the SOCAG project was substantially higher than that in the CHI project.[17]

The adjusted cost per unit for the houses in the SOCAG project was $13,423, compared to $9,328 for the houses in the CHI project. The primary reason for higher costs in the SOCAG project was due to the slower construction method.

When the houses in the SOCAG project were compared to those in the CHI project on a living area basis, the CHI houses cost less per square foot of living area.[18] The SOCAG houses cost an average of $15.33 per square foot of living area. On an adjusted basis they were $11.51. This compared to $8.35 adjusted cost for the CHI houses.

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[16]See Appendix, p. 198.

[17]See Appendix, pp. 193-199.

[18]See Appendix, pp. 194,200.

Summary

Using three mutual-help associations SOCAG, a self-help housing project in southwestern Oklahoma, assisted 19 low-income farm families build new homes. Unlike the CHI project in Caddo County, SOCAG emphasized construction training, administration, household operation, family budgeting and other skills in its self-help housing program. The participants developed more skills in the SOCAG project than did participants in the other Oklahoma self-help housing projects. Technical assistance costs in the SOCAG project were higher than those in the CHI project, even though CHI built more than twice the number of houses. SOCAG incurred higher technical assistance costs mainly because it had a slower method of construction. The SOCAG project averaged 62 weeks per house for construction, compared to 19 weeks by CHI.

The SOCAG houses were larger than the CHI houses. On construction basis alone, SOCAG's construction costs compared favorably with CHI's. However, when total costs were compared, the inclusion of technical assistance created a large cost difference between the two projects.

Kiamichi Electric Cooperative Area Housing Committee, Inc.

Introduction.--The Kiamichi Electric Cooperative Area Housing Committee, Inc., (KECAHC) helped low-income families in two sparsely settled counties (Latimer and LeFlore) in southeastern Oklahoma build new homes. Latimer County had a population of 8,601 in 1970. Only Wilburton, the county seat, qualified as an urbanized area, with a population of 2,504. LeFlore County, with a population of 32,137, had two places in 1970 in excess of the 2,500 limit, Poteau (5,500) and Heavener (2,566).

Most of the poor and inadequate housing in these two counties were found in the rural areas. Many of the houses were overcrowded and had inadequate plumbing facilities. Most of the houses in both counties were valued less than $15,000. Most of the renter-occupied units had a monthly contract rent of less than $60. The median rent in Latimer County was $45 and $40 in LeFlore County.

In 1970 about one-third of the families in Latimer County had incomes below the poverty level. Most of them lived in owner-occupied houses. Almost 40 percent of the families in LeFlore County had incomes below the poverty level and most of them lived in owner-occupied houses.

Formation of the project.--The Kiamichi Electric Cooperative, Inc., mailed questionnaires to more than 7,000 families in the cooperative's five-county area. More than 1,000 questionnaires were returned. On the basis of these returns, it was determined that one-third of the families, stating a need or desire for better housing, had an annual income of less than $5,000.

The electric cooperative established a housing committee and submitted a proposal to the Farmers Home Administration for sponsoring a self-help housing project. Farmers Home Administration approved the application for $78,700, covering the period May 1, 1971, through April 30, 1973, with the cooperative providing an additional $51,200 in "in kind" funds. The total cost was $129,900, and it was planned to build 60 houses.

Operation of the project.--Within two weeks after KECAHC received its funding, loan applications were filed with the Poteau County supervisor for the first group of participants. The director, coordinator/trainer and one construction supervisor began work immediately.

There was a vo-tech school in LeFlore County. An arrangement was made to use vo-tech students to help build the first group of houses. It was thought that the

arrangement would be helpful to the self-help families and at the same time provide students with a practical laboratory for developing skills. The vo-tech labor was used mainly for installing plumbing and wiring. In addition, in one case, vo-tech labor was used for hanging sheetrock, digging footings for the foundation and laying water, sewer and gas lines. All told, vo-tech provided about 30 percent of the labor on the first group of houses. Contract labor accounted for an additional 10 percent, and participant labor provided the remaining 60 percent. The students were not used after the completion of the first six houses because it was found that the vo-tech labor was too slow and in many cases the workmanship was unsatisfactory.

The project used a mutual-help housing association for its first project in each county.[19] After the first group, participants were allowed to work mainly on an individual self-help basis. The use of the prefabricated houses from Perdue Industries eliminated many of the advantages ordinarily derived from having mutual-help associations.

Between May, 1971 and April, 1973 the project had built, or was constructing, 25 self-help houses. In late April, 1973 the project received permission from FmHA to

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[19]See Appendix, p. 201.

continue the project as long as any funds remained. There was about $6,000 of unspent money. This money was used to complete the houses under construction and to complete the 26th house which was begun after May 1, 1973. Twenty of these houses were prefabricated. They were purchased as a package from Perdue Industries. Six houses were similar in design and size to the prefabricated houses but were built from the ground up by the participants, using stick construction methods. The stick built houses required a larger participant labor contribution than the prefabricated houses.

Construction of the houses.--Construction time for the houses built in LeFlore County was about a month less than the houses built in Latimer County.[20] There were two principal reasons for this. One was that the LeFlore County construction supervisor used an assistant so that someone was always working on the houses with the participants. Before the assistant was hired, there was no supervision of the participants when the construction supervisor had to be away from the houses buying materials, meeting with FmHA or KECAHC personnel or at another building site. The construction supervisor in Latimer County did not have an assistant until January, 1973, and thus his construction time was

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[20]See Appendix, p. 202.

longer. The second reason was the difference in objectives of the two construction supervisors. The LeFlore County supervisor attempted to get the family into their new home as soon as possible, but the Latimer County supervisor emphasized the training aspects of self-help. Both construction supervisors were efficient and both received praise from the participants.

The Latimer County supervisor designed two special tools for the participants. One tool was called the "sheetrock jack." This enabled a participant working by himself to install 4x8 foot size sheetrock on the ceiling. The "sheetrock jack" had a bed frame on which the sheetrock was laid flat. The bed frame was supported by a 2 inch pipe stem on a stable platform. A boat trailer wench welded to the side of the stem was used for raising and lowering the bed frame. The second tool was named a "tape box." The "tape box" was designed so that an unskilled person could tape and float the sheetrock seams on walls and ceilings. This task must be done well; otherwise the seams will show after painting. Other projects have usually contracted the tape and float work to professionals, but by using the "tape box" an unskilled participant could apply the proper amount

of "mud" to the tape and get high quality results, with little or no supervision.

The LeFlore County construction supervisor invented a tool for self-help participants called a "shingle stick." The "shingle stick" was designed so that an unskilled participant could lay roofing shingles with a minimum of supervision. According to the construction supervisor, it was "impossible" for the participant to make a mistake using the "shingle stick."

Participants in self-help housing projects usually build as good a house as their incomes allow. Some families could qualify for a new home only if they were able to cut costs. Costs could be reduced by using stick construction methods, by using masonite siding instead of brick, and by not installing a range, carpeting, and so forth.

Self-help houses built in LeFlore County were generally more expensively finished than the houses in Latimer County. Houses built in LeFlore County were all prefabricated. Eleven of them were brick. On the other hand, six houses built in Latimer County used stick construction methods and two of the seven prefabricated houses used masonite siding rather than brick. In general, participants in the Latimer County area had less ability to repay a mortgage than the

participants in LeFlore County. The average annual income for nine LeFlore County participants was $4,056 as compared to $3,670 for 12 Latimer County participants. The difference of $386 meant that the self-help families in LeFlore County were able to obtain larger loans from FmHA than those in Latimer County, and hence were able to finish their houses more expensively.

KECAHC averaged building almost one house per month.[21] This was the highest rate of house production for any of the Oklahoma projects. Technical assistance for the project averaged $3,027, which was higher than CHI's but substantially below SOCAG's.[22]

Total cost per unit, including technical assistance, construction and building site development, is the best gauge of the efficiency of a self-help housing project. KECAHC averaged low total cost per housing unit. On an adjusted basis, KECAHC's total cost per housing unit was the lowest among the Oklahoma projects.[23] KECAHC built the smallest houses among the Oklahoma projects. None of the houses had

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[21]See Appendix, p. 204.

[22]See Appendix, pp. 192, 198, 204.

[23]See Appendix, pp. 193, 199, 205.

garages or car ports. The reduced size of the house caused KECAHC housing cost, on a living area basis, to exceed that of CHI.[24] On an adjusted basis, KECAHC's housing cost of living area was slightly less than CHI's.

Summary

The Kiamichi Electric Cooperative Area Housing Committee, Inc., (KECAHC) helped 26 low-income families in southeastern Oklahoma build new homes during the 1970-1973 period.

KECAHC used mostly prefabricated houses. The project found that individual self-help worked better than mutual-help associations. Vo-tech students were used at the beginning of the project but later discontinued because of inferior workmanship and inefficiency.

KECAHC employed two construction supervisors, one for each county. Both construction supervisors invented special tools for the self-help participants to use.

This project averaged building almost one self-help house per month. Primarily due to its shorter construction scheduling, KECAHC had the lowest adjusted housing cost per unit among the Oklahoma projects. Even though the houses in

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[24]See Appendix, pp. 194, 206.

this project were the smallest in size of living area, on an adjusted basis KECAHC houses cost less per square foot of living area than the other self-help houses in Oklahoma.

Findings and Recommendations

The Oklahoma experience in self-help housing suggests a number of lessons.

All three projects revealed that some outside funding (technical assistance) was necessary to get the projects started.

In all three projects it was shown that unskilled people can work effectively on their homes. Skills can be taught and learned in self-help housing projects.

Racial questions can be solved without too much trouble, if the cooperative aspect of self-help housing is emphasized.

Allowing participants in the self-help housing project to select building sites gave them added satisfaction to their participation. Changes in the design and type of housing construction can be made in order to make adjustments to problems as they arise.

Permitting participant families to work solely on their own homes without the assistance of other participants, if this were their individual decision, could still lead to

successful completion of house construction projects. The individual self-help construction method was as efficient as the mutual self-help construction method. In addition, the individual self-help construction method enabled the participant to have greater freedom and satisfaction with the building site location, scheduling of work, design, and quality of construction.

All three of the Oklahoma projects had low construction costs due to the use of self-help methods. By emphasizing faster construction methods, the CHI and KECAHC projects were able to enjoy low building costs, even when technical assistance costs were included.

CHAPTER VI

RESULTS AND ANALYSIS OF INTERVIEWS OF PARTICIPANTS

Introduction

Other than field interviews with administrative personnel involved in the housing projects in Oklahoma, some interviews were conducted with the participants in the self-help housing projects.[1] The interviews covered a broad range of subjects that included their personal characteristics; basic attitudes toward their present homes, constructed as part of the self-help housing projects, and their prior homes; their attitudes toward the self-help housing project; and whether or not they acquired benefits, other than their new houses, from their experience in the self-help housing project.

The participants were mainly residents of rural areas, had incomes below the poverty level, had less than a tenth

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[1] A total of 73 participants were interviewed among the three Oklahoma self-help housing projects.

grade education, generally had little or no training or prior experience in house construction, and needed some assistance toward the construction of their family homes. These factors have to be taken into consideration if any meaning is to be made of the replies to the questions asked during the interviews.

Personal characteristics of the participants.--The participants ranged in age from less than 20 years to more than 60 years of age, with 36-46 years of age being the most common age group. Generally, they had less than a tenth grade education, and their incomes in 1972 were between $2,500 and $7,500. Most of the participants were not employed in jobs that were construction-oriented.[2]

General attitudes toward the houses.--Almost all the participants preferred their present self-help house to their prior house. The only favorable comments made about the prior houses had emotional overtones: "It was home for the children." "We had good neighbors," etc.[3]

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[2]See Appendix, p. 207.

[3]See Appendix, p. 208. More than three-fourths of the prior houses were 30 years or older. Most of these prior houses had complete plumbing, kitchen and bath facilities, although nine did not have piped water.

About one-fifth of those interviewed said they liked everything about their new homes. The favorable attitudes toward the new homes related to house design and operation and better location. There was one participant, however, who did not like his new home. He said that the house was located on a hill without much protection from the elements. He also felt that he was not ready to assume the responsibility of a 30 year mortgage.

When asked what they liked about living in the new self-help houses, some of the participants responded as follows:

> There's nothing to compare with it.
>
> I just love it.
>
> The kids have closets for the first time.
>
> The house has more storage so it's easier to keep clean.
>
> We have a quieter neighborhood.
>
> There's more privacy and larger play area for the children.
>
> The kids are proud of it.
>
> This place is mine.
>
> The main thing is that the children can bathe.[4]

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[4]This last comment was made by the mother of a black family who had previously lived in an abandoned farm house on

Prior and Present House

Questions were asked about the prior house and the present house. The purpose was to determine under what conditions each house was used; housing costs; number, maturity and sex of family members; and the participant's impression of his prior and present environment.

Exterior.--The prior houses generally had weathered wood siding, tar paper, or asbestos siding while the new houses used brick, combination brick-masonite, masonite, wood siding, or aluminum siding.

Occupancy and convenience.--The self-help houses averaged about one room larger than the prior houses. In addition, slightly fewer people occupied the self-help houses than had occupied the smaller prior houses. All the self-help houses located in town had public water supply and public sewer facilities. Usually the houses located in the country had a private well and a private septic system. In some cases, especially in the KECAHC project, the houses

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a hill. During the winter the family vacated the north half of the house and lived only in the south two rooms in an attempt to stay warm. Occasionally the well would go out, and they would have to haul water from a relative's place nine miles away. The mother recalled that once they had drunk creek water.

located in the country had a rural water supply, but the families had to provide for their own septic system.

Cost and tenure.--In all three projects the participants paid only slightly higher monthly payments for the new houses, including insurance and taxes, than they had paid in rent for the prior houses. The participants in the CHI project had lived in their houses slightly over three years. This was the longest tenure in any of the self-help housing projects.

Utility costs.--The average bill for any utility used in the houses constructed for the three projects was less than $14 per month. In the projects sponsored by the rural electric cooperatives the major utility expense was electricity, especially since many houses were all-electric, whereas in the prior houses (of which none were all electric) gas was often the major utility cost. It was noted that the SOCAG project did not have any all-electric houses. Several houses in the CHI project did not incur water utility expense because they had private wells with electric pumps.

Change in the Standard of Living

There is evidence that the families of the participants enjoyed a higher standard of living once they moved into their self-help houses. More than four times as many of the

families used air conditioning units in their new house; three times as many families had a clothes dryer; all the families had enclosed heating units, compared to 19 previously. There was little change with respect to the number of the families having checking and saving accounts. A substantially fewer number of the families received commodities or food stamps after they moved into their new houses. Almost twice as many of the families bought automatic washing machines after they moved into their new houses. Almost 50 percent more of the families had telephones in their present houses.

Not all of the families made large purchases of appliances and furnishings for their new houses. For those in the CHI and SOCAG projects who made purchases, credit expenditures averaged $1,500. Cars and pickups were the most important credit expenditures. The second most important credit purchases were washing machines and dryers for the CHI participants and furniture for the SOCAG participants. The seven KECAHC participants making credit purchases averaged about $400. Participants in the CHI project, making cash purchases, averaged $600. SOCAG participants averaged spending $200. Only two KECAHC participants made substantial cash purchases, and these were for carpet, which would ordinarily be paid for out of mortgage funds.

Self-Help Housing Program

The participants were asked how they found out about the self-help project, if they understood and were satisfied with the program, and what benefits were acquired from the program.

Knowledge of the self-help project.--Most of the participants in the CHI and SOCAG projects found out about the program from project personnel or other participants. Most of the participants in the KECAHC project found out about it from persons in the communities where the self-help houses were built.

Expectations of the loan.--Many participants thought that it had taken longer to process the loan applications than they had been led to expect. However, there was considerable agreement among the participants that the loan funds had been sufficient to cover specified costs. One-half of the SOCAG participants complained that their house payments had been higher initially or that the payments had increased since they had moved in. House payments had changed for only one KECAHC participant. Although the houses in the CHI project had been occupied longer than in the other two projects, there were relatively fewer complaints about payments being higher than expected.

Understanding of program and responsibilities.--Most participants indicated a general understanding of the self-help housing program and the obligations and responsibilities of home ownership. Several, mostly CHI participants, had life insurance policies on the head of household large enough to pay off the mortgage. Almost all participants understood that if a spouse died, the house would be transferred to the survivor. Most felt that the surviving family would "remain in the house because they would not be able to rent as nice a house for the amount of their payments."

When asked what would happen to them should they fail to make payments on their mortgage, the participants gave varied answers. About half believed that FmHA would go along with a reasonable explanation and an effort to catch up with the payments. A few families said they "just would not let it happen." Many families emphasized that their mortgage payment was the first bill paid each month and that they had been able to stay current on a monthly basis.

The typical participant believed that he could sell or rent, with FmHA's permission, but that selling would be easier than renting. He was aware of others in the project who had either sold or rented their houses and from them knew the policies of the county supervisor. The CHI

participants had the most accurate understanding of what they could do with their houses, but this knowledge appeared to be more from actual experience or personal knowledge about other participant's experiences than from what FmHA or CHI personnel had told them.

Most participants were confused about their equity. Unlike most other low-income housing programs, self-help provided the families with a substantial equity base from the time they moved into the house. They did not understand how the amount of their equity could differ from the amount of their promissory note. They did not view their equity as a savings which they could use, if they sold the house. In fact, the prevalent attitude was that once they built the self-help house, they had to remain in it until the mortgage was paid off.[5] Therefore, the participants were not aware of one of the major economic aspects of the self-help housing program.

Satisfaction with the program.--Most participants in the three projects appeared satisfied with the self-help housing program. Complaints were of a minor nature. The CHI participants, who were the greatest in number and had lived

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[5]Only five respondents indicated that they did not expect to live in the house for the next 30 years.

in the houses the longest, had the fewest complaints. The few CHI complaints were directed towards the work done by the subcontractors. (Only a few participants exchanged labor.) The SOCAG participants also criticized work performed by subcontractors, especially the plumbers. The SOCAG participants were more critical of the work done by other participants in the project than of any other group because "it seems like everyone does not do as good a job on others' houses as they do on their own." A few SOCAG participants faulted the trainees because "they were always coming to work drunk." A few KECAHC participants expressed dissatisfaction with some of the project personnel: "A big problem is that you can't do anything without the construction supervisor and he couldn't stay with eight families at once." Another comment was: "They kept telling us we'd have enough funds, but we ran short."

Only six families said that they would not build a self-help house again, if given the opportunity. The general belief of those that would was that "there is no other way that we could get a house this nice by any other means." Others admitted that "it's hard work but it's worth it." Several participants said that they would rather obtain a house through the self-help method than buy a contractor

built house, even if they were able to qualify. The reasons given were: "The payments are lower this way;" "You know what is in the house that you build yourself;" "You learn a lot by building your own home and you really appreciate it more." One Mexican-American participant stated, ". . . the self-help organization helps the family get over many obstacles; for example, legal problems, discrimination, and so forth. The FmHA supervisor had a lot of pressure not to allow self-help housing but he was fair. In the history of Harmon County only two black families have brick houses, and they were built during our self-help project."[6]

Benefits from the Project

On the whole, the participants benefited more from the project in terms of obtaining and maintaining a well constructed and attractive home than in getting a job.

About half the male heads of household already knew the necessary construction skills. Most wives or female heads of household did not. In the SOCAG project, the participants performed almost all jobs except plumbing, brick laying, and cement finishing. The wives in the SOCAG project did as much work as their husbands and more, in some cases.

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[6]Participant interview.

They were obviously proud of what they had accomplished and how much they had learned. Mostly the CHI participants performed only those jobs they already knew how to do. The work by the CHI male heads of household was more limited and work by their woves, or the female heads, rare. In the KECAHC project few wives worked, and the jobs for the male heads of household were not difficult, when prefabricated houses were built. In the cases where stick construction methods were used, the participants did more work.

All participants learned enough about how their houses were put together to be able to make most repairs and some improvements. Few repairs had been required, even in the CHI project where the length of occupancy was longest. Improvements consisted mainly of planting a lawn and shrubbery; pouring a driveway, patio and sidewalks, and building fences.

All the participants appeared proud of their homes and seemed to enjoy showing special features. A few participants who qualified for mutual-help houses with their Indian tribes chose the self-help housing program instead, because they considered the quality of the houses to be better. Their monthly payments under the Bureau of Indian Affairs Mutual-Help housing program would have been less than what they were in the self-help housing program.

Most participants indicated that their involvement in the self-help housing program had been the most important thing that had ever happened to them. One female head of household, whose husband had died during the application period, told of how she had tried to find out details about the responsibilities and obligations of home ownership in attempting to reach a decision about whether or not to continue her application. She remarked that the FmHA and project personnel could not answer many of her questions about taxes, buying land, obligations under the mortgage and so forth. She went to the county court house to find out what she would have to pay for taxes. She got FmHA to tell her exactly how much her monthly payments would be on the mortgage and what she would have to do in order to sell or rent the house. She contacted the utility companies about operational costs for the house. Finally, she told the project personnel she would participate but only with the understanding that the total cost of the house, land, and improvements would not exceed the amount of the mortgage funds. This lady had lived 11 years with her husband and 10 children in a four room wooden shack, estimated to be over 100 years old. It had no piped water or complete kitchen or bath facilities. Today all but three of her children have grown up and moved away.

In response to the question, "What things do you like about owning a house?" she replied: "I'm proud to be the owner of a home. I call it a privilege."

The self-help housing participants derived more from the program than a decent house. As one participant stated, "The additional responsibility of home ownership pushes the family into a better point of view. The house is a form of forced savings." Many families emphasized that the most important thing was not getting a decent house; it was much more complicated. It involved self-esteem. Part of it was that the family owned the house, and other people in the community knew they had built a nice home. The children were proud of their new home. The families acquired social skills, along with construction skills. The head of a Mexican-American family, with nine school-age children, said he was seriously considering running for the local school board, even though he had less than six years of schooling.

Most heads of household were not employed on jobs that were construction-oriented. Therefore, only a few of the participants reported that they had been able to use their self-help housing experience to get a better job or to make more money on their present job. However, one participant who had been a farm operator, got a job as a carpenter after

he had helped to build five self-help houses. Another participant went into the plumbing business. One participant got a job with the cooperative sponsoring the project. The most successful case was a participant with less than a sixth grade education who had previously been a farm laborer. He did such an outstanding job building his house that the project hired him as the coordinator/trainer. When the project ended, he went into the hothouse tomato business and built his own 48' x 96' hothouse. One housewife became skilled in laying roofing shingles and was offered a job by a local builder. Several wives from the SOCAG project stated they felt capable of doing various carpentry and electrical jobs because of what they had learned from the self-help housing project. Another participant, who was a carpenter, later got a job with the project as a subcontractor and eventually hired three former participants to work with him.

Findings and Recommendations

The results of the interviews of the participants of the three Oklahoma self-help housing projects reveal the following:

The prior houses occupied by the participants were generally old and in poor condition. The participants were pleased with the self-help houses they had helped to build.

The participants made significant contributions of labor toward the construction of their houses, even though they generally did not previously possess construction skills.

The participants generally thought that the self-help housing program was fair. Most of the participants indicated they would again build their houses using self-help methods under the same circumstances because of the cost savings, high quality of construction, or because it was the only home ownership program for which many of them could qualify.

Choice of location of the building site for the self-help house seemed to be an important aspect of consumer satisfaction. The average monthly payments for the self-help houses were only slightly higher than the participants had previously paid for rent. The participants seemed to prefer to work on their houses individually rather than in mutual self-help groups.

CHAPTER VII

CONCLUSIONS

The problem of housing is universal and will continue to be a pressing one as population increases. A major aspect of the housing problem is how to house the poor--those who have low incomes. A major issue in housing the low-income families, then, is the gap between what the family can afford to spend for housing and what the builder must receive.

Although the basic design of the dwelling today is much unchanged from earlier periods, it is more difficult for modern man to provide for his housing needs in his complicated society. A new form of social organization is required, if housing is to be made available to people solely on the basis of need.

The subject of self-help housing is important because it has been used successfully to satisfy housingneeds of low-income people. Self-help housing is a new form of social organization. The objective of self-help housing is to

reduce, if not eliminate, the gap between what the participant can afford and what the builder must receive. This is done by making the participant the builder, and the builder the owner.

The purpose of this study was to find out about self-help housing and to determine if this concept is a feasible means ofproviding decent shelter at a minimum cost.

This study investigated self-help housing by examining three areas: overseas experience, domestic experience, and the Oklahoma experience.

Overseas experience.--The overseas experience in self-help housing has been mainly rewarding and fruitful and indicates the validity and practicability of self-help housing as a technique to meet the housing needs not only of developing countries but those countries with advanced technology, as Sweden. A number of significant observations may be made of the overseas experience in self-help housing.

Throughout the world, where there has been a major spiritual and financial commitment by the government, self-help housing has worked. Self-help housing projects have worked best when self-help methods have been combined with prefabrication components.

Self-help methods, emphasizing the use of indigenous building materials and labor, integrated with overall social and economic objectives, have been a major contribution to economic development in those few countries where it has been used.

In Sweden, self-help housing has been an effective means of providing decent housing to low-income families for almost fifty years.

Domestic Experience.--The experience in self-help housing in the United States parallels the success attained by overseas areas. And yet, although the self-help housing experience in this country dates back to the thirties, only a few projects have been large enough to present a worthwhile experience. The study, however, of the domestic experience in self-help housing brings out the following salient features.

There is a pressing housing problem that exists in the United States, and although national housing goals have been set, they are far from being met. There is no low-income housing policy because there has not been a commitment to provide housing according to need.

Present self-help housing production is only minute compared to subsidized housing needs. Where self-help housing

projects have been set up, they have been successful. By using self-help methods, more lower-income families can be reached than are presently being reached with contractor-built low-income housing projects. By supporting self-help housing, the government's interest subsidy spending reaches a larger number of families. The present interest subsidy procedures do not make it advantageous to the low-income home owner to use self-help methods since the government receives the benefits.

The procedures presently used by FHA and FmHA are largely biased in favor of contractors and do not encourage self-help housing. The FmHA has not fully supported the self-help housing aspects nor encourage technical assistance funding under the programs specifically provided by law.

The United States has the technology and the resources to implement self-help housing on a large scale, but it has failed to make a spiritual commitment to provide the housing needs of the poor.

Oklahoma experience.--The results of the field study of three self-help housing projects in Oklahoma indicate that self-help housing is a feasible concept toward providing housing for low-income families in rural areas. A number of valuable findings also resulted from the field study:

Independent self-help organization of participants was the best type of organization for self-help housing participants.

The most efficient construction was achieved with prefabrication and contracted-stick construction methods. Whenever stick construction was not used, the project was more flexible in organizing families, locating building sites, and controlling the rate of production.

The monthly mortgage payments for the larger new homes were only slightly higher than the housing costs of the old homes. There was no evidence that utility costs were substantially higher in the new houses than they had been in the prior houses.

Almost all the participants were satisfied with the self-help houses. There was evidence that the families' standard of living improved after they moved into the new houses.

The self-help housing program provided the participant with a substantial equity from the time he moved into the new house, but there was little evidence that the participant had considered selling his house and using this equity for other purposes. Some of the families were able to make substantial credit purchases after moving into the new houses.

Most participants were satisfied with the performance of the project personnel. The work done on the houses by vocational-technical students and trainees was considered unsatisfactory by many participants and project personnel. Some mutual-help participants were critical of work done by other participants on their house.

Only a few participants said that they would not build their self-help house again. The participants accrued several benefits as a result of their involvement in the project: getting a well-built house for less money; learning and acquiring vocational and social skills; getting better jobs or earning more money from present jobs.

Conclusion.--The study of self-help housing in several countries has demonstrated the utility of the technique in meeting the housing needs of low-income families. The program, however, can use a lot of help from the government. In spite of the fact that the history of self-help housing goes back to the thirties, self-help housing programs have not received the governmental support which it deserves in the United States in order to make large scale operations feasible. A promise has been made to provide every citizen a decent home, but the commitment seems to have been made to the construction industry rather than to the poor who need

it most. From the evidence it is clear that self-help methods are important, but they should be joined with a large scale delivery system emphasizing prefabrication techniques.

Involvement in organized self-help housing projects can mean a whole new way of life for the participants. There is evidence that significant changes occur in their lives, opening new vistas and opportunities for them, and thereby enriching their lives and increasing their potential usefulness to the community. This is the only housing program that provides the family with a substantial equity from the moment they move in. The equity represents potential capital to the family, if they decide to sell the house in order to seek employment elsewhere, go into business, etc. The importance of the equity should be made clear to self-help participants so that they will not feel obligated to remain in the house and ignore opportunities elsewhere.

If the United States is really serious about providing six million subsidized housing units during the period of 1968 to 1978, it should seriously consider the advantages of a large-scale self-help housing program. As shown in this study, the use of self-help housing methods will reduce the amount of interest subsidy required and provide housing for the lower-income families who are not now being served by

present subsidized contractor-built housing methods.

In the final analysis, self-help methods, when properly applied, according to the U.S. Department of Housing and Urban Development, increases housing production, decreases costs to the user and to the public, and contributes to the elimination of the symptoms and causes of poverty.

B I B L I O G R A P H Y

BIBLIOGRAPHY

Books

Abrams, Charles. Man's Struggle for Shelter in an Urbanizing World. Massachusetts: The M. I. T. Press. 1964.

_____. The City is the Frontier. New York: Harper and Row. 1965.

Turner, J. F. C. and Fichter, R., eds. Freedom to Build. New York: The Macmillan Company. 1972.

Reports

Building Systems Development, Inc. Large Scale Self-Help Housing Methods. Report No. 4. San Francisco. June, 1970.

Cochran, Clay L. Cooperative Self-Help Housing in Nova Scotia. Washington, D.C.: International Self-Help Housing Association. April, 1968.

Housing Assistance Council and Rural Housing Alliance. Farmers Home Administration Home Ownership Loans, Section 502. Washington, D.C.: Housing Assistance Council and Rural Housing Alliance. April, 1972.

_____. Farmers Home Administration Self-Help Technical Assistance Grants, Section 523. Rural Housing Programs No. 6. Washington, D.C.: Housing Assistance Council and Rural Housing Alliance. April, 1972.

Housing and Home Finance Agency. Office of International Housing. Colonial Managua, An Aided Self-Help Housing Project in Nicarauqua Administration, Self-Help 203. Washington, D.C.: Housing and Home Finance Agency. June, 1962.

_____. Housing in India. Country Report Series. Washington, D.C.: Housing and Home Finance Agency. Reprinted June, 1967.

Margolis, Richard J. Something to Build on, The Future of Self-Help Housing in the Struggle Against Poverty. Washington, D.C.: International Self-Help Housing Associates and the American Friends Service Committee, 1967.

Inter-American Housing and Planning Center. Self-Help Housing Guide. Bogata, Colombia: Inter-American Housing and Planning Center. 1962.

National Rural Housing Alliance. Report of the Second National Rural Housing Conference. Washington, D.C.: National Rural Housing Alliance. November 30, 1972.

Office of Economic Opportunity, Migrant Division. Title III-B EOA Programs for Migrant and Seasonal Farm Workers. Washington, D.C.: Government Printing Office. n.d.

Office of International Housing Service. Housing and Home Finance Agency. Ideas and Methods Exchange No. 13. Washington, D.C.: Housing and Home Finance Agency. June, 1962.

Organization for Social and Technical Innovation, Inc. Self-Help Housing in the U.S.A.: A Preliminary Report. Presented to the United States, Department of Housing and Urban Development. Cambridge, Massachusetts: The Organization for Social and Technical Innovation. June, 1970.

_____. Self-Help in Housing: The Feasibility of Large-Scale Expansion of Sponsored Mutual Self-Help Housing Programs in the United States. Report No. 7. Cambridge, Massachusetts: Organization for Social and Technical Innovation, Inc. June, 1970.

_____. The Feasibility of Large-Scale Expansion of Sponsored Housing Rehabilitation Programs Using Self-Help Methods in the United States, Report No. 5. Cambridge, Massachusetts: Organization for Social and Technical Innovations, Inc. June, 1970.

Self-Help Enterprises, Inc. A Program with Low-Income Families in the San Joaquin Valley. Visalia, California: Self-Help Enterprises, Inc. n.d.

Self-Help Enterprises, Inc. "Project Report, No. 14." Visalia, California: Self-Help Enterprises, Inc. March 1, 1970 - February 28, 1971.

_____. "Project Report, No. 15," Visalia, California: Self-Help Enterprises, Inc. March 1, 1971 - January 28, 1972.

_____. "Project Report, No. 16," Visalia, California: Self-Help Enterprises, Inc. February 1, 1972 - November 30, 1972.

United Nations. Department of Economic and Social Affairs. Rural Housing: A Review of World Conditions. New York: United Nations Publication. 1969.

_____. Urbanization: Development Policies and Planning. New York: United Nations Publication. 1968.

Venezuelan National Rural Housing Program. "Experience of a National Rural Housing Program: Case of Venezuela." Information Paper. Presented by Arturo R. Ortiz to the National Rural Housing Conference. Warrenton, Virginia. Caracas, Venezuela. n.d.

Bulletins

Rural Housing Alliance. Low-Income Housing Bulletin. Washington, D.C.: Rural Housing Alliance. (Various Issues.)

_____. The RHA Reporter. Washington, D.C.: Rural Housing Alliance. September, 1972.

Yearbooks

U.S. Department of Housing and Urban Development. 1970 HUD Statistical Yearbook. Washington, D.C.: Government Printing Office. April, 1971.

_____. 1971 HUD Statistical Yearbook. Washington, D.C.: Government Printing Office. April, 1972.

Unpublished

Application for Community Action Program. "Program Accounting Work Program." To the Office of Economic Opportunity. From Southwest Oklahoma Community Action Group, Inc., n.d.

Interview with Ernie Chabot. Migrant Division. Office of Economic Opportunity. Washington, D.C. November 14, 1972.

Letter from Billie Bryan. Manager. Caddo Electric Cooperative. Binger, Oklahoma. To Mr. Clark McWhorter, State Director. Farmers Home Administration. Stillwater, Oklahoma. September 6, 1966.

Interview with Bill Murray. Legislative Representative on Community Development. National Rural Electric Cooperative Association. Washington, D.C. November 9, 1972.

Letter from Dorothy Clausen. Supervisor. Self-Help Housing Project. Binger, Oklahoma. To Mr. Fred Beliele. Farmers Home Administration. El Reno, Oklahoma, November 8, 1967.

Letter to Southwest Oklahoma Community Action Group. "Special Condition." From the Office of Economic Opportunity. n.d.

Smith, James D. "A First Report on the Characteristics of Self-Help Participants in the San Joaquin Valley." Pennsylvania State University. n.d.

Southwest Oklahoma Community Action Group, Inc. "Membership Agreement" form. n.d.

Public Documents

U.S. Congress. House. Committee on Banking and Currency. Basic Laws and Authorities on Housing and Urban Development. 92d Cong., 1st sess. Washington, D.C.: Government Printing Office. 1971.

U.S. Congress. House. Committee on Banking and Currency. National Housing Goals. 91st Cong., 1st sess. Washington, D.C.: Government Printing Office. 1969.

U.S. Congress. House. Committee on Banking and Currency. To Amend and Extend Laws Relating to Housing and Urban Development. 90th Cong., 1st sess. Washington, D.C.: Government Printing Office. 1967.

U.S. Congress. Senate. Select Committee on Nutrition. Promises to Keep: Housing and Federal Failure in Rural America. 92d. Cong. 2d sess. Washington, D.C.: Government Printing Office. April, 1972.

_____. Study of International Housing Reports From U.S. Agencies and International Organizations. 92d Cong. 1st sess. Washington, D.C.: Government Printing Office. June 18, 1971.

U.S. Department of Agriculture. Economic Development Division. Economic Research Service. The Economic and Social Condition of Rural America in the 1970's, Part I. Printed for the use of the Committee on Government Operations, U.S. Senate. 92d. Cong. 1st sess. 1971. Washington, D.C.: Government Printing Office. May, 1971.

_____. Housing Conditions in Areas Served by Farmers Home Administration Housing Programs, 1970, by States. Statistical Bulletin No. 492. Washington, D.C.: Government Printing Office. September, 1972.

_____. Farmers Home Administration. Program Analysis and Statistics Staff. Financial Management Division. Report of Loan and Grant Obligations, 1962 Fiscal Year Through June 30. Washington, D.C.: Farmers Home Administration. 1962. Table 1.

U.S. Department of Agriculture. Farmers Home Administration. Report of Loan and Grant Obligations, 1970 Fiscal Year Through June 30. Washington, D.C.: Farmers Home Administration. 1970. Table 1.

_____. Report of Loan and Grant Obligations, 1971 Fiscal Year Through June 30. Washington, D.C.: Farmers Home Administration. 1971. Table 1.

_____. Report of Loan and Grant Obligations, 1972 Fiscal Year Through June 30. Washington, D.C.: Farmers Home Administration. 1972. Table 1.

U.S. Department of Commerce. Bureau of the Census. Census of Population: 1970 General Population Characteristics. Final Report PC (1)-B38 Oklahoma. Washington, D.C.: Government Printing Office. 1971.

_____. Detailed Housing Characteristics: 1970 Census of Housing. Final Report HC(1)-B38 Oklahoma. Washington, D.C.: Government Printing Office. March, 1972.

_____. General Housing Characteristics: 1970 Census of Housing. Final Report HC(1)-A38 Oklahoma. Washington, D.C.: Government Printing Office. August, 1972.

_____. General Social and Economic Characteristics: 1970 Census of Population. Final Report PC(1)-C38 Oklahoma. Washington, D.C.: Government Printing Office. March, 1972.

_____. U.S. Census of Housing, 1960, Vol. I., States and Small Areas, Part I: United States Summary. Washington, D.C.: Government Printing Office. August, 1972.

_____. U.S. Census of Population: 1960 General Population Characteristics, Oklahoma. Final Report PC(1)-38B. Washington, D.C.: Government Printing Office, 1961.

_____. Social and Economic Statistics Administration. Bureau of Economic Analysis. Survey of Current Business. Vol. 53, No. 6. June, 1973.

U.S. Department of Housing and Urban Development. Division of International Affairs. Aided Self-Help Housing Improvement. Ideas and Methods Exchange No. 18. Washington, D.C.: Government Printing Office. n.d.

_____. Aided Self-Help Housing in Africa. Ideas and Methods Exchange No. 65. Washington, D.C.: Government Printing Office. n.d.

_____. Housing in Guatemala. Country Report Series. Washington, D.C.: Government Printing Office. Reprinted June, 1972.

_____. Self-Help Housing in Puerto Rico. HUD International Brief No. 5 Program Report. Washington, D.C.: Government Printing Office. June, 1971.

_____. Office of Public Affairs. "Auto-Construccion," HUD Challenge. (Vol. III, No. 5.) Washington, D.C.: Government Printing Office. May, 1972. pp. 27-31.

Laws

Public Law 90-448. 82 Stat. 476.

APPENDIX A

TABLES

TABLE 6

PRIVATELY OWNED HOUSING UNITS BEGUN UNDER FHA PROGRAMS
COMPARED WITH TOTAL FOR UNITED STATES,
1968 - 1971

Housing Units	1968	1969	1970	1971
Total U.S. units	1,507,700	1,466,800	1,433,600	2,052,200
Total FHA proposed units	219,863	233,320	420,990	525,967
Total proposed FHA home mortgage units	147,745	153,593	233,476	301,195
Total FHA units as a percent of total U.S. units	14.6	15.9	29.4	25.6
FHA home mortgage units as a percent of total FHA units	67.2	65.8	55.4	57.3

Source: U.S. Department of Housing and Urban Development, 1971 HUD Statistical Yearbook (Washington, D.C.: Government Printing Office, April, 1972), p. 158.

TABLE 7

PRIVATELY OWNED HOUSING UNITS STARTED UNDER FHA 221 AND FHA 235(i) PROGRAMS COMPARED WITH TOTAL PROPOSED FHA HOME MORTGAGE UNITS, 1968 - 1971

Housing Units	1968	1969	1970	1971
Total proposed FHA home mortgage units	147,745	153,593	233,476	301,195
FHA 221 units	4,805	7,675	20,089	19,917
FHA 235(i) units	45	8,676	47,192	51,223
Other FHA home mortgage units	142,895	137,242	166,195	203,055

Source: U.S. Department of Housing and Urban Development, 1971 HUD Statistical Yearbook (Washington, D.C.: Government Printing Office, April, 1972), Table 164, p. 158.

TABLE 8

CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT,
MUTUAL-HELP HOUSING ASSOCIATIONS,
1966-1969

Group No.	Year and Name of Association	Average Length of Association (months)	Type of Number of Houses Built[1]	Promissory Notes (hours)	Labor Contribution (average man-hours per family)
1	1966 CGW Association	8	P (5)	400	600
2	1967 Caddo Housing Association	7	P (4) IS (1)	600 600	524 1,112
3	1967 Eakly Housing Association	4	F (4)	300	276
4	1967 Anadarko Self-Help Housing Association	18	F (4)	300	n.a.
5	1968 KEW Association	10	F (2) CS (1)	300	n.a.
6	1969 Self-Help Housing Association #6	8	CS (1)	300	314

Source: Project records.

[1]Type houses built: (P)-prefabricated; (IS)-individual stick-construction; (CS)-contracted stick construction; (F)-factory. Numbers in parenthesis indicate number of houses built using that method.

TABLE 9
CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT, AVERAGE LENGTH OF LOAN APPLICATION AND CONSTRUCTION PERIODS, 1967-1971

Major Period and Method of Construction	Number of Houses	Type of Self-Help Organization	Average Period in Weeks		
			Application	Construction	Total
1967 Prefabrication	9	Mutual-help	18	22	40
1968 Factory	10	Mutual-help & Individual Self-Help	16	18	34
1969-1971 Contracted Stick Construction	19	Individual	14	19	33
Overall Project Average	-	--	15	19	34

Source: Project records.

TABLE 10
CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT
AVERAGE CONSTRUCTION COSTS
1967-1971

Major Period and Method of Construction	Number of Houses	Average Construction Cost[1] (per unit)	Boeckh Index for Period (1967=100)	Adjusted Construction Cost (per unit)
1967 Prefabrication	9	$6,476	100.0 [2]	$6,476
1968 Factory	10	7,100	107.4 [2]	6,611
1969 Contracted Stick Construction	5	7,513	116.6 [2]	6,443
1970 Contracted Stick Construction	6	8,302	122.3 [2]	6,788
1971 Contracted Stick Construction	8	9,278	132.8 [3]	6,986

Source: Project Records.

[1]Does not include building site development cost. Ten houses were built during 1967 but one house was built almost entirely by a participant using stick construction methods.

[2]U.S. Department of Housing and Urban Development, 1971 HUD Statistical Yearbook (Washington, D.C.: Government Printing Office, 1972), Table 364, p. 330.

[3]U.S.Department of Commerce, Social and Economic Statistics Administration, Bureau of Economic Analysis, Survey of Current Business, Vol. 53, No. 3 (Washington, D.C.: Government Printing Office, March, 1973), p. S-10.

TABLE 11

CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT, AVERAGE TECHNICAL ASSISTANCE COST BY PERIOD OF CONSTRUCTION 1966-1972

Major Period and Method of Construction	Number of Months	Technical Assistance per Period of Construction (federal only)	Number of Houses	Average Technical Assistance (per unit)	Rate of House Production (houses per month)
1967 Prefabrication	18	$21,825	10*	$2,182*	.55
1968 Factory	12	16,997	10	1,700	.83
1969-1971 Contracted Stick Construction	38	44,460	19	2,340	.50
Overall Project	68	83,282	39	2,135	.57

Source: Project records.

*During this period, 10 houses were built, including one not using prefabricated methods of construction. Technical assistance was required for the participant, however, and his house was included in calculating the average.

TABLE 12
CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT
TOTAL COST OF PROJECT
1966-1972

Major Period and Method of Construction	Number of Houses	Major Construction Period			Total Cost	Average Cost (per unit)	Boeckh Index 1967=100	Adjusted Cost (per unit)
		Technical Assistance	Construction Costs	Building Site Development Costs				
1967 Prefabrication	9[1]	$19,643[1]	$58,284[1]	$ 7,754[1]	$ 85,681[1]	$ 9,520[1]	100.0	$ 9,520
1968 Factory	10	16,997	71,005	8,477	96,479	9,648	107.4	8,983
1969-1971 Contracted Stick Construction	19	44,460	161,595	17,889	223,944	11,786	124.9[2]	9,436
1967-1971 Overall Project	39[3]	83,282[3]	296,381[3]	35,081[3]	414,744[3]	10,634	114.0[4]	9,328

Source: Project records.

[1]Ten houses were built during this period but only nine used this method of construction. Only 90 percent of the average technical assistance cost has been allocated to this method of construction. None of the construction costs or building site development costs for the non-prefabricated house has been included.

[2]Weighted average for three-year period calculated by the writer.

[3]The costs of the tenth house which were not included for the prefabrication period were added back so that the project's total and average costs could be determined.

[4]Weighted average for the five-year period calculated by writer.

TABLE 13

CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF LIVING AREA COST BY METHOD OF CONSTRUCTION, 1967-1971

Major Period and Method of Construction	Number of Houses	Average Cost[1] (per unit)	Adjusted Cost[1] (per unit)	Average Living Area	Housing Cost per Sq. Ft. of Living Area	
					Average	Adjusted
1967 Prefabrication	9[2]	$ 9,520	$ 9,520	972[3]	$ 9.79	$9.79
1968 Factory	10	9,648	8,983	1,152	8.38	7.80
1969-1971 Contracted Stick Construction	19	11,786	9,436	1,166	10.11	8.35
Overall Project	39	$10,634	$27,328[4]	1,117[4]	$ 9.52	$8.35[4]

Source: Project records.

[1]From Table 12.

[2]Ten houses were built during this period but only nine used this method of construction. Only 90 percent of the average technical assistance cost has been allocated to this method of construction. None of the construction costs or building site development costs for the non-prefabrication house has been included.

[3]In addition, these houses had an attached garage with an average of 264 square feet.

[4]The costs of the tenth house which were not included for the prefabrication period were added back so that the project's total and average costs could be determined.

TABLE 14

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT
PARTICIPANT LABOR CONTRIBUTION
APRIL, 1968 TO JUNE, 1973

Year, Name and Location of Association	Average Length of Association (months)	Type and Number Of Houses Built[1]	Promissory Notes (hours)	Labor Contribution[2] (average man-hours per family)
1969				
Golden Rule Homes (Gould and Hollis in Harmon County)	25	MSC (8)	1,500	1,500
1971				
Mangum Self-Help Housing (Mangum in Greer County)	12	MSC (4)	1,500	700
1972				
Dream Homes (Hollis in Harmon County)	12	MSC (7)	1,500	900
Overall project average	--	--	--	1,110

Source: Project records and interviews with project personnel.

[1]Type houses built: MSC -mutual-help stick construction. Numbers in parenthesis indicate number of houses using this method.

[2]Based on estimates by SOCAG personnel. Individual records not available.

TABLE 15

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT
AVERAGE LENGTH OF LOAN APPLICATION AND
CONSTRUCTION PERIODS,
1969-1973

Period and Name of Association	Number of Houses	Average Period in Weeks		
		Application	Construction	Total
1969-1971				
Golden Rule Homes	8	18	65	83
1971-1972				
Mangum Self-Help Housing	4	13	44	57
1972-1973				
Dream Homes	7	26	69	95
Overall project average	-	20	62	82

Source: Project records and interviews with participants.

TABLE 16

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT
AVERAGE CONSTRUCTION COSTS
1970 - 1972

Major Period of Construction and Housing Association	Number of Houses	Average Construction Cost[1] (per unit)	Boeckh Index for Period (1967 = 100)	Adjusted Average Construction Cost (per unit)
1970				
Golden Rule Homes	8	$8,849	122.3 [2]	$7,235
1971				
Mangum Self-Help Housing	4	9,503	132.8 [3]	7,156
1972				
Dream Homes	7	9,828	145.8 [3]	6,741

Source: Project records.

[1]Does not include building site development cost. This project did pay the first year's payments on the mortgage from the loan funds. This amount was usually paid on the day the loan funds were received to carry through the period the house was expected to be under construction and, therefore, this cost has been included in the construction cost.

[2]U.S. Department of Housing and Urban Development, 1971 HUD Statistical Yearbook (Washington, D.C.: Government Printing Office, 1972), Table 364, p. 330.

[3]U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of Economic Analysis, Survey of Current Business, Vol. 53, No. 6 (Washington: D.C.: Government Printing Office, June, 1973), p. S-10.

TABLE 17

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT, AVERAGE TECHNICAL ASSISTANCE COST BY PERIOD OF CONSTRUCTION 1968-1973

Major Period of Construction and Housing Association	Number of Months	Technical Assistance per Period of Construction (federal only)	Number of Houses	Average Technical Assistance (per unit)	Rate of House Production (houses per month)
1970					
Golden Rule Homes	34	$77,583	8	$ 9,698	.24
1971					
Mangum Self-Help Housing	15	48,501	4	12,124	.27
1972					
Dream Homes	8	21,208	7	3,030[1]	.88[1]
Overall Project	57	147,292	19	7,752[1]	.33

Source: Project records.

[1]This is based on the OEO funded self-help technical assistance which was not sufficient to complete the Dream Homes Association houses. Funds from other sources were used to complete these houses in the spring of 1973.

TABLE 18

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT

TOTAL COST OF PROJECT

1968-1973

Major Period and Method of Construction	Number of Houses	Major Construction Period			Total Cost	Average Cost (per unit)	Boeckh Index 1967=100	Adjusted Cost (per unit)
		Technical Assistance	Construction Costs	Building Site Development Costs				
1970								
Golden Rule Homes	8	$77,583	$ 79,792	$ 5,010	$153,385	$19,173	122.3[2]	$15,677
1971								
Mangum Self-Help Housing	4	48,501	38,012	3,800	90,313	22,578	132.8[2]	17,002
1972								
Dream Homes	7	21,208[1]	68,796	6,000	96,004[1]	13,715	145.8[2]	9,407
Overall Project	19	147,292	177,600	14,810	339,702	17,879	133.2[3]	13,423

Source: Project records.

[1]Actually this does not represent the total cost for construction of these seven houses since the project was funded through December 31, 1972, and construction was not completed until the end of May, 1973. An undetermined amount of funds were used from other sources to provide additional technical assistance for the completion of the Dream Homes Association houses in the spring of 1973.

[2]From Table .

[3]Weighted average for the three construction periods (1970-1972).

TABLE 19

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF LIVING AREA COST BY ASSOCIATION 1968-1973

Major Period of Construction and Housing Association	Number of Houses	Average Cost (per unit)	Adjusted Cost[1] (per unit)	Average Living Area (sq. ft.)	Housing Cost per Sq. Ft. of Living Area	
					Average	Adjusted
1970						
Golden Rule Homes	8	$19,173	$15,677	1,185	$16.18	$13.23
1971						
Mangum Self-Help Housing	4	22,578	17,002	1,154	19.56	14.73
1972						
Dream Homes	7	13,715	9,407	1,151	11.92	8.17
Overall Project	19	$17,879	$13,423	1,166	$15.33	$11.51

Source: Project records.

[1]From Table 18.

TABLE 20

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT
MUTUAL-HELP HOUSING ASSOCIATIONS
1971 - 1972

Year, Number and Location of Association	Average Length of Association (months)	Type and Number Of Houses Built	Promissory Notes[1] (hours)	Labor Contribution (average man-hours per family)
1971 Group #1 LeFlore County	10	P (6)	n.a.	1,103
1971 Group #2 Latimer County	9	P (3) IS (3)	n.a. n.a.	1,383 1,492

Source: Project records.

[1]The project records did not contain promissory notes.
n.a. - not available.

TABLE 21

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT,
AVERAGE LENGTH OF LOAN APPLICATION AND
CONSTRUCTION PERIODS,
1971 - 1973

Major Period and Type of Self-help Organization	Type and Number of Houses Built[1]	Average Period in Weeks		
		Application	Construction	Total
1971 Group #1 (LeFlore County)	P (6)	25	13	38
1971 Group #2 (Latimer County)	P (3)	22	17	39
	IS (3)	23	17	40
1972-1973 Individual self-help	P (11)	17	17	34[2]
	IS (3)	26	24	50[2]
Overall project average	--	21	17	38

Source: Project records and interviews with project's construction supervisors.

[1]Type houses built: P - prefabricated; IS - individual stick construction. Numbers in parenthesis indicate the number of houses built using that method.

[2]Includes time estimated by construction supervisor required to complete houses under construction.

TABLE 22

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT,
AVERAGE CONSTRUCTION COSTS
1972 - 1973

Major Period and Method of Construction	Number of Houses	Average Construction Cost[1] (per unit)	Boeckh Index for Period (1967 = 100)	Adjusted Construction Cost (per unit)
1972				
Prefabrication	17	$8,257	145.8 [2]	$5,663
Stick Construction	3	6,600	145.8 [2]	4,527
1973				
Prefabrication	3	9,522	156.3 [3]	6,092
Stick Construction	3	9,242	156.3 [3]	5,913

Source: [1]Project records. Does not include building site development cost.

[2]U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of Economic Analysis, Survey of Current Business, Vol. 53, No. 6 (Washington, D.C.: Government Printing Office, June, 1973), p. S-10.

[3]March, 1973 data was latest available.

TABLE 23

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT, AVERAGE TECHNICAL ASSISTANCE COST BY PERIOD OF CONSTRUCTION 1972-1973

Major Period and Method of Construction	Number of Houses	Technical Assistance		Number of Houses	Average Technical Assistance (per unit)	Rate of House Production (houses per month)
		Time Period	Construction			
1971-1972						
Prefabrication	20	$58,300	$49,555	17	$2,915	1.0
Stick Construction			8,745	3	2,915	
1973						
Prefabrication	7	20,400	10,200	3	3,400	.86
Stick Construction			10,200	3	3,400	
1971-1973	27	$27,700	-	26	$3,027	.96

Source: Project records.

TABLE 24

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT

TOTAL COST OF PROJECT

1971-1973

Major Period and Method of Construction	Number of Houses	Major Construction Period			Total Cost	Average Cost (per unit)	Boeckh Index 1967=100	Adjusted Cost (per unit)
		Technical Assistance	Construction Costs	Building Site Development Costs				
1972								
Prefabrication	17	$49,555[1]	$140,369	$24,686	$214,610	$12,624	145.8[2]	$8,658
Stick Construction	3	8,745[1]	19,800	5,479	34,024	11,341	145.8[2]	7,779
1973								
Prefabrication	3	10,200	28,566	4,908	43,674	14,558	156.3[3]	9,314
Stick construction	3	10,200	27,726	3,327	41,253	13,751	156.3[3]	8,798
1972-1973								
All Methods	26	$78,700	$216,461	$38,400	$333,561	$12,829	148.2[4]	$8,656

Source: Project records.

[1]Based on 20-month period: 1971 - 8 months; 1972 - 12 months.

[2]U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of Economic Analysis, Survey of Current Business, Vol. 53, No. 6 (Washington, D.C.: Government Printing Office, June, 1973), p.

[3]March, 1973 data was latest available.

[4]Weighted average for two-year period: 1972-1973.

TABLE 25

KEHAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF LIVING AREA COST BY METHOD OF CONSTRUCTION 1972-1973

Major Period and Method of Construction	Number of Houses	Average Cost[1] (per unit)	Adjusted Cost[1] (per unit)	Average Living Area (sq.ft.)	Housing Cost per Sq. Ft. of Living Area	
					Average	Adjusted
1972						
Prefabrication	17	$12,624	$ 8,658	1,070	$11.80	$ 8.09
Stick Construction	3	11,341	7,779	1,083	10.47	7.18
1973						
Prefabrication	3	14,558	9,314	1,024	14.22	9.10
Stick Construction	3	13,751	8,798	997	13.79	8.82
1972-1973						
All Methods	26	$12,829	$ 8,656	1,058	$12.12	$ 8.18

Source: Project records.

[1]From Table 24.

TABLE 26

OKLAHOMA SELF-HELP HOUSING PROJECTS,
CHARACTERISTICS OF PARTICIPANTS,
NOVEMBER-DECEMBER, 1972

Characteristic	Number of Participants			
	CHI	SOCAG	KECAHC	Total
Participants	34	19	20	70
Participants with previous construction experience or training	10	5	3	18
Heads of households with health problems	11	4	9	24
Participants gaining employment through self-help housing project	3	2	1	6
Participants unable to work due to disabilities	4	0	2	6
Participants who were veterans	17	3	5	25
Participants with less than 10th grade education	23	14	10	47
Participants between 25-56 years of age	31	15	12	58
Families with 1972 income between $2,500-$7,500	30	17	18	65

Source: Interviews with families.

TABLE 27

OKLAHOMA SELF-HELP HOUSING PROJECTS,
SELECTED CHARACTERISTICS OF PRIOR HOUSES,
NOVEMBER-DECEMBER, 1972

Facility and Age	Number of Houses			
	CHI	SOCAG	KECAHC	Total
Number of houses	34	19	20	73
Houses with complete kitchen facilities	29	17	16	62
Houses with piped hot and cold water	27	16	16	59
Houses with piped cold water only	2	3	0	5
Houses with no piped water	5	0	4	9
Houses with complete bath facilities	23	17	14	54
Houses estimated to be 30 years old or older	30	15	13	58

Source: Interviews of participants.

TABLE 28

CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF COST AND TENURE OF PRIOR HOUSES AND SELF-HELP HOUSES, DECEMBER, 1972

Cost and Tenure	Prior Houses[1]	Self-help Houses
Number of houses	33	34
Average monthly payment or rent	$37.32	$40.16
Average length of tenure (months)	37.3	40.4

Source: Interviews of families, December 14-21, 1972.

[1]One participant was not interviewed about his previous house since he lived with his parent and did not control the use or operation of the house.

TABLE 29

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF COST AND TENURE OF PRIOR HOUSES AND SELF-HELP HOUSES, DECEMBER, 1972

Cost and Tenure	Prior Houses	Self-help Houses
Number of houses	19	19
Average monthly payment or rent	$40.14[1]	$50.75[3]
Average length of tenure (months)	50[2]	18[4]

Source: Interview of families, December 7-21, 1972.

[1]Based on an average of 14 houses. Five of the participants made in-kind payments.

[2]Based on an average of only seven participants. Length of tenure on remaining 12 participants not available.

[3]One participant whose house was under construction at the time of the interview did not know the amount of his monthly payment.

[4]Based on an average of 12 participants who were living in their self-help houses at the time of the interview.

TABLE 30

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF COST AND TENURE OF PRIOR HOUSES AND SELF-HELP HOUSES, NOVEMBER-DECEMBER, 1972

Cost and Tenure	Prior Houses	Self-Help Houses
Number of houses	20[1]	20[1]
Average monthly payment or rent	$40.16[2]	$44.73
Average length of tenure (months)	150[3]	4[4]

Source: Interviews of families, November 23, 1972, to December 28, 1972.

[1]Of the 26 participants in the project, interviews were conducted with 20 participants.

[2]Four of the 20 participants did not make cash payments for the prior house.

[3]Based on an average of only six participants. Length of tenure on remaining 14 participants not available.

[4]Four of the 20 houses were under construction at the time of the interview with the participants.

TABLE 31

CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT
COMPARISON OF PRIOR HOUSES AND SELF-HELP HOUSES,
DECEMBER, 1972

Characteristic	Prior Houses[1]	Self-Help Houses
Number of houses	33	34
Houses connected to public water supply	15	10
Houses connected to sewage system	12	8
Average number of rooms	4.5	5.1
Number of people living in houses	202	183

Source: Interviews of families, December 14-21, 1972.

[1]One participant was not interviewed about his previous house since he lived with his parents and did not control the use of operation of the house.

TABLE 32

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF PRIOR HOUSES AND SELF-HELP HOUSES, DECEMBER, 1972

Characteristic	Prior Houses	Self-Help Houses
Number of houses	19	19
Houses connected to public water supply	17	19
Houses connected to public sewage system	16	19
Average number of rooms	4.0	5.8
Number of people living in houses	114	71[1]

Source: Interviews of families, December 7-21, 1972.

[1]At the time of the interview, seven of the houses were under construction and this figure represents the total number of people living in 12 houses which averaged 5.9 people per house.

TABLE 33

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT, SELECTED CHARACTERISTICS OF PRIOR HOUSES AND SELF-HELP HOUSES, NOVEMBER-DECEMBER, 1972

Characteristic	Prior Houses	Self-Help Houses
Number of houses	20	20
Houses connected to public water supply	14	17
Houses connected to public sewage system	11	12
Average number of rooms	3.8	4.95
Number of people living in houses	84	79

Source: Interviews of families, November 23, 1972, to December 28, 1972.

TABLE 34

CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT
COMPARISON OF FACILITIES AND SELECTED
HOUSEHOLD CHARACTERISTICS OF PRIOR
HOUSES AND SELF-HELP HOUSES
DECEMBER, 1972

Facility or Characteristic	Prior Houses[1]	Self-help Houses
Number of houses	33	34
Houses with telephones	16	27
Houses with window unit air conditioners	2	13
Houses with automatic washing machines	10	29
Houses with automatic clothes dryers	3	16
Houses with enclosed heating units only	7	34
Households with checking account	16	20
Households with saving account	1	3
Households receiving surplus commodities	16	8

Source: Interviews of families, December 12-21, 1972.

[1]One participant was not interviewed about his previous house since he lived with his parent and did not control the use or operation of the house.

TABLE 35

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF FACILITIES AND SELECTED HOUSEHOLD CHARACTERISTICS OF PRIOR HOUSES AND SELF-HELP HOUSES, DECEMBER, 1972

Facility and Characteristic	Prior Houses	Self-help Houses[1]
Number of houses	19	12
Houses with telephones	7	8
Houses with window unit air conditioners	0	3
Houses with automatic washing machines	5	9
Houses with automatic clothes dryers	2	6
Houses with enclosed heating units only	5	12
Households with checking account	11	8
Households with saving account	1	2
Households receiving surplus commodities	6	2

Source: Interviews of families, December 7-21, 1972.

[1]Only 12 of the self-help houses had been completed at the time of the interview.

TABLE 36

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF FACILITIES AND SELECTED HOUSEHOLD CHARACTERISTICS OF PRIOR HOUSES AND SELF-HELP HOUSES, NOVEMBER-DECEMBER, 1972

Facility or Characteristic	Prior Houses	Self-help Houses
Number of houses	20	16
Houses with telephones	7	7
Houses with window unit air conditioners	3	5
Houses with automatic washing machines	10	9
Houses with automatic clothes dryers	4	4
Houses with enclosed heating units only	7	16
Households with checking account	10	8
Households with saving account	3	2
Households receiving surplus commodities	7	6

Source: Interviews of families, November 23, 1972, to December 28, 1972.

TABLE 37

CHI, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF UTILITY COST OF PRIOR HOUSES AND SELF-HELP HOUSES, DECEMBER, 1972

Utility	Number of Houses Incurring Costs	Average Monthly Utility Cost			
		$1-$14	$15-$19	$20-$29	$30 & over
Prior Houses:					
Electricity	33	22	7	2	2
Gas	33	10	8	12	3
Water and Sewage	15	15	-	-	-
Self-Help Houses:					
Electricity	34	3	5	17	9
Gas	10	9	1	-	-
Water and Sewage	10	10	-	-	-

Source: Interviews of families, December 14-21, 1972.

TABLE 38

SOCAG, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF UTILITY COST OF PRIOR HOUSES AND SELF-HELP HOUSES, DECEMBER, 1972

Utility	Number of Houses Incurring Costs	Average Monthly Utility Cost			
		$1-$14	$15-$19	$20-$29	$30& Over
Prior Houses:					
Electricity	17[1]	14	1	1	-
Gas	16[1]	13	3	-	-
Water and Sewage	15[1]	14	1	-	-
Self-Help Houses:					
Electricity	11[2]	6	4	1	-
Gas	11[2]	11	-	-	-
Water and Sewage	11[2]	10	1	-	-

Source: Interviews of families, December 2-21, 1972.

[1]One participant could not answer question on utility costs. One participant received house with utilities paid by employer/landlord.

[2]Seven of the participant's houses were under construction at the time of the interview and one participant did not know the amount of his utility costs.

TABLE 39

KECAHC, OKLAHOMA, SELF-HELP HOUSING PROJECT, COMPARISON OF UTILITY COSTS OF PRIOR HOUSES AND SELF-HELP HOUSES, NOVEMBER-DECEMBER, 1972

Utility	Number of Houses Incurring Costs	Average Monthly Utility Cost			
		$1-$14	$15-$19	$20-$29	$30 & over
Prior Houses:					
Electricity	19	15	3	-	1
Gas	18	17	1	-	-
Water and Sewage	12	12	-	-	-
Self-Help Houses:					
Electricity	16[1]	7	5	3	1
Gas	7[1]	7	-	-	-
Water and Sewage	15[2]	15	-	-	-

Source: Interviews of families, November 23, 1972, to December 28, 1972.

[1]Only 16 of the houses had been occupied long enough to have received utility bills and nine of these had no gas costs since they were all electric houses.

[2]One of the houses used well water and therefore incurred no water and sewer utility cost.

APPENDIX B

DEFINITION OF TERMS

Housing.--Housing may refer to a housing unit which is occupied or intended for occupancy as separate living quarters. Housing may also mean the housing process which includes activities concerned with pre-construction, construction and operation and maintenance.

Sub-standard housing.--A dwelling unit is considered substandard in this study if there are not complete plumbing facilities and/or if there is an average of more than one person per room residing in the unit. Substandard housing may also include housing units evaluated as deteriorating or dilapidated by the U.S. Bureau of the Census.

Complete Plumbing Facilities.--Complete plumbing facilities means "with all plumbing facilities" as defined by the 1970 Census of Housing, i.e., units which have hot and cold water piped inside the structure as well as flush toilet and a bathtub or shower inside the structure for the exclusive use of the occupants of the unit.[1]

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[1]U.S. Department of Commerce, Bureau of the Census, General Housing Characteristics: 1970 Census of Housing,

Demand for housing.--Demand for housing exists when a consumer uses his purchasing power for the purpose of acquiring housing, even though he has the opportunity of exercising his purchasing power over alternative goods and services. Demand may represent "need" under certain conditions. But need by itself cannot represent demand since additionally there must be the ability and willingness to pay.

Rural areas.--Rural areas will be defined in terms of service areas of the Farmers Home Administration (FmHA). This FmHA service area is defined as being open country or any town or city which is rural in character and whose population does not exceed 10,000.

Low-income family.--Any family who can qualify for low-income housing under any of the low-income housing programs of the Department of Housing and Urban Development (HUD) or Farmers Home Administration (FmHA) is considered a low-income family. In the state of Oklahoma, the low-income housing programs considered by this study were limited to organized mutual-help and, in all cases, the mortgage funds were provided by Farmers Home Administration. In Oklahoma

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Final Report HC(1)-A38 Oklahoma, Appendix B (Washington, D.C.: Government Printing Office, August, 1972), p. 7.

FmHA states that the annual adjusted family income of a low-income family cannot exceed $7,000.

Self-help.--Self-help occurs when an individual participates in any or all phases of the housing process for his own dwelling in an effort to reduce the amount of external assistance required.[2]

Independent self-help.--Independent self-help is when the individual initiates all activities and ". . . retains decision making power in all phases of the housing process."[3]

Organized self-help.--Organized self-help means the individual participant does not initiate any activity beyond the initial application to join an existing self-help housing project. The individual contributes labor during various phases of the housing process but primarily on the construction of his own dwelling.

Organized mutual-help.--Organized mutual-help is the same as organized self-help except that the emphasis during the housing process is for the participants to work on each other's houses and for no one to be able to complete any

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[2]Organization for Social and Technical Innovation, Inc., Self-Help Housing in the U.S.A.: A Preliminary Report, presented to the United States, Department of Housing and Urban Development. Cambridge, Massachusetts: The Organization for Social and Technical Innovation, June, 1970, p. 9.

[3]Ibid.

phase of his housing before any other member of that group. The organization is primarily group-oriented in this case, whereas with organized self-help, the organization is individual-oriented.

Sweat equity.--Equity is determined by the market value of the property, less any mortgages. Sweat equity is created by contributing labor during the construction phase, which results in market value without a corresponding increase in the mortgage or other external claims.

Technical assistance funding.--Financial assistance made available to qualified organizations so that they may develop, administer, supervise, and coordinate effective programs of technical and supervisory assistance, which will aid low-income families in carrying out the objectives of a self-help housing program.

Self-help sponsor.--The overall responsibility of the self-help sponsor is to organize, administer, and supervise the production of housing through organized self-help or organized mutual-help programs. Each self-help project has a sponsor and each sponsor's policies and objectives are likely to differ slightly.

APPENDIX C

QUESTIONNAIRE FOR SELF-HELP HOUSING

FAMILY PARTICIPANTS

I am studying the method by which families obtain decent and comfortable homes via the self-help housing program. Although the self-help housing program is relatively new to Oklahoma (the first project was begun in Caddo County in 1966), organized self-help housing began in the United States 35 years ago and since then has enabled more than a million people around the world to live in decent housing.

Although my study examines the total self-help housing program, I am studying most carefully the three projects in Oklahoma. As a self-help housing family in Oklahoma, it would be most helpful if you would answer the following questions on your particular involvement in the self-help housing project. Please understand that any information you give me will be held in confidence and no one other than myself will know what information applies to which family. In finished form only totals and general statements will be used.

re:_____

PRIOR HOUSE

This first group of questions are about your previous house; that is, the house you lived in before moving here.

1. What is the address (or directions)?

2a. If you rented the house, how much did you pay each month? _____

b. Did anyone in your house work for the landlord? (Please tell me by type of work and hours per month.)

3. If you owned the house, how much do you think it would have sold for when you moved? (C-B) _____

4. How many rooms did you have in your house? (Do not count bathrooms, porches, balconies, foyers, halls, or half-rooms). _____

5. Did you have complete kitchen facilities? (Complete kitchen facilities are a sink with piped water, a range or cook stove, and a refrigerator.) _____

6. Was there hot and cold piped water in your house? _____

If no, was there piped cold water? _____

COMPARISON OF SELF-HELP AND PRIOR HOUSE

The next group of questions are about your self-help house and then about the house you used to live in.

re:_____

	Self-help house	Prior house
1. How old is (was) your house? (C-C)	_____	_____
2. What type material is (was) the exterior of the house made of?	_____	_____
3. Do (did) you have any bathrooms in your house? (A complete bathroom is a room with flush toilet, bathtub or shower, and wash basin with piped water. A half bathroom has at least a flush toilet or bathtub or shower, but does not have all the facilities for a complete bathroom).	_____	_____
Do (did) you have more than one?	_____	_____
If yes, how many?	_____	_____
4. Do (did) you have a telephone in your house?	_____	_____
If yes, how much is (was) your usual monthly bill? (C-D)	_____	_____
5. How much is (was) your usual monthly electricity bill? (C-D)	_____	_____
6. How much is (was) your usual monthly gas bill for the house? (C-D)	_____	_____
7. How much is (was) your usual monthly water bill? (C-D)	_____	_____
8. How is (was) your house cooled in the summer? (C-E)	_____	_____
9. Is (was) your house connected to public water?	_____	_____
10. Is (was) your house connected to a public sewer line?	_____	_____

re: _____

	Self-help house	Prior house
11a. Do (did) you go to someone else's house to wash your clothes?	_____	_____
b. If no, how are (were) your clothes washed? (C-F)	_____	_____
12a. Do (did) you go to someone else's house to dry your clothes?	_____	_____
b. If no, how are (were) your clothes dried? (C-G)	_____	_____
13. Do (did) you receive surplus commodities?	_____	_____
14. How much do (did) you usually spend on food per month? (C-H)	_____	_____
15. Do (did) you have a checking account with a bank?	_____	_____
16a. Do (did) you have a savings account?	_____	_____
b. Where is (was) your savings account located? (bank; savings and loan association; credit union, etc.)	_____	_____
c. How often do (did) you make deposits?	_____	_____
17. How many people live (lived) in your house? (State A=adult; T=teenager; PT=preteenager. Also state sex of each).	_____	_____
	_____	_____

18. How is (was) your house heated in the winter? (fuel; open or enclosed; forced air; etc.)

re: _____

19a. What do you like about where you are living now?

b. What did you like about where you lived before?

20a. What don't you like about where you live now?

b. What didn't you like about where you used to live?

21a. What is (was) the main job of the head of the house?

b. If the wife of the head has (had) a job outside the home, what is (was) her job?

SELF-HELP HOUSING PROGRAM

A.1. Pre-construction

a. How did you first find out about the self-help housing program?

b. Did it take about as long to approve your loan application as you had been led to expect that it would?

If no, what were the problems?

c. Did the amount of your monthly mortgage payments coincide with what you had been told to expect at the time you made application?

If no, did anyone attempt to explain why there was a difference?

Did anyone explain that the amount of your monthly payments is based on your family's income and may be subject to change under certain circumstances?

re: _____

2. Construction

   a. Did it take about as long to build your house after you received the mortgage funds, as you had been led to expect that it would?

   b. Did you have enough mortgage funds to complete the house as you had planned to (allow participant to answer question in the way that he understands it. In some cases it may be interpreted to mean at the time of application, while in other cases it may mean sometime later).

   c. Have you been satisfied with the workmanship of the subcontractors?

   d. Have you been satisfied with the workmanship of any other family participants who might have worked on your house?

3. How about the meeting on the use of building tools. Did you learn any new things or did you already know all these things:
   already knew _____
   learned new things _____

4. Have you been able to use any of the things that you learned which helped you to take care of your house or to improve it?
   no _____
   yes*_____

   *What were those things you learned?

5. Have you used any of the things that you learned in building your house to get a better job or get more money on the job you have?
   no _____
   yes*_____

   *What were those things you learned?

re: _____

B. The next set of questions also deal with the self-help housing program.

1. What happens to your house if the head of the house becomes totally disabled or dies before the mortgage is paid off?

2. What happens if you are not able to make payments on your house note?

3. If you want to rent or sell your self-help house, would you need Farmers Home Administration, the self-help housing project, or anyone else's approval in order to sell or rent your house?

4. Have you ever tried to get anyone else in on self-help housing?

no _____

If so, who?* yes*_____

Did they apply?

5. If you had it to do all over again, would you build a self-help house? (Please explain.)

6. Since you moved into the house, have you bought any of the following things? (Let's go through each item and you tell me what you bought, how much you paid, and how many months you have to pay on it). (C-I)

7. Do you really plan to live in this house for the next 30 years or so until the mortgage is paid off?

no*_____

*If no, then why did you buy it? yes _____

re: _____

PERSONAL QUESTIONS ABOUT HEAD OF THE HOUSE

These questions will ask about the head of the house. Please feel free to let me know if you had rather not answer a question.

1. Outside the self-help housing program, has the head of the house ever received any training, education or experience in any building trade? If so, please explain.

2. Does the head of the house have any health problems which limit the kind of amount of work that he can do? If so, please explain.

3a. How did the head of the house find his (her) present job? (friend, personal interview, OESC, self-help housing staff, etc.)

b. How did the head of the house find his (her) job when he (she) lived in the prior house?

4. Has the head of the house (if male) ever been in the army, marines, air force, navy, etc? If so, which one? _____

5. What things do you like about owning a house? (Please give examples.)

6. What things don't you like about owning a house? (Please give examples.)

7. Does head of the house have a high school diploma or about that? _____

8. What was the highest grade completed by head of the house? (C-J) _____

9. How much was your family's income this year? (C-K)_____

10. How old is the head of the house? (C-L) _____

re: _____

QUESTIONNAIRE CHOICE CARDS

CARD B

a. Less than $1,000
b. $1,000 - $3,000
c. $3,000 - $6,000
d. $6,000 - $9,000
e. $9,000 - over

CARD C

a. Less than 5 years
b. 5 - 9 years
c. 10 - 19 years
d. 20 - 29 years
e. 30 years or older

CARD D

a. Zero
b. $1 - $5
c. $6 - $9
d. $10 - $14
e. $15 - $19
f. $20 - $29
g. $30 and over

CARD E

a. open ventilation
b. water cooler
c. fan units
d. attic fan
e. air conditioner, window units
f. air conditioner, central unit

CARD F

a. automatic machine
b. wringer machine
c. commercial laundry
d. laundromat
e. by hand
f. other (specify)

CARD G

a. automatic dryer, electric
b. automatic dryer, gas
c. clothes line
d. laundromat
e. commercial laundry
f. other (specify)

CARD H

a. $39 or less
b. $40 - $59
c. $60 - $79
d. $80 - $99
e. $100 - $119
f. $120 and over

CARD I

a. range or cook stove
b. refrigerator
c. television
d. living room furniture
e. bedroom furniture
f. power mower
g. car or pickup
h. deepfreeze
i. washing machine
j. clothes dryer
k. air conditioner
l. carpet
m. fence
n. other (dining room, drapes, etc.)

CARD J

a. 6th or less
b. 7th - 9th
c. 10th - 11th
d. 12th

CARD K

a. Less than $1,500
b. $1,500 - $2,500
c. $2,500 - $3,500
d. $3,500 - $5,000
e. $5,000 - $7,500
f. $7,500 and over

CARD L

a. 18 - 26
b. 26 - 36
c. 36 - 46
d. 46 - 56
e. 56 - 66
f. 66 and over