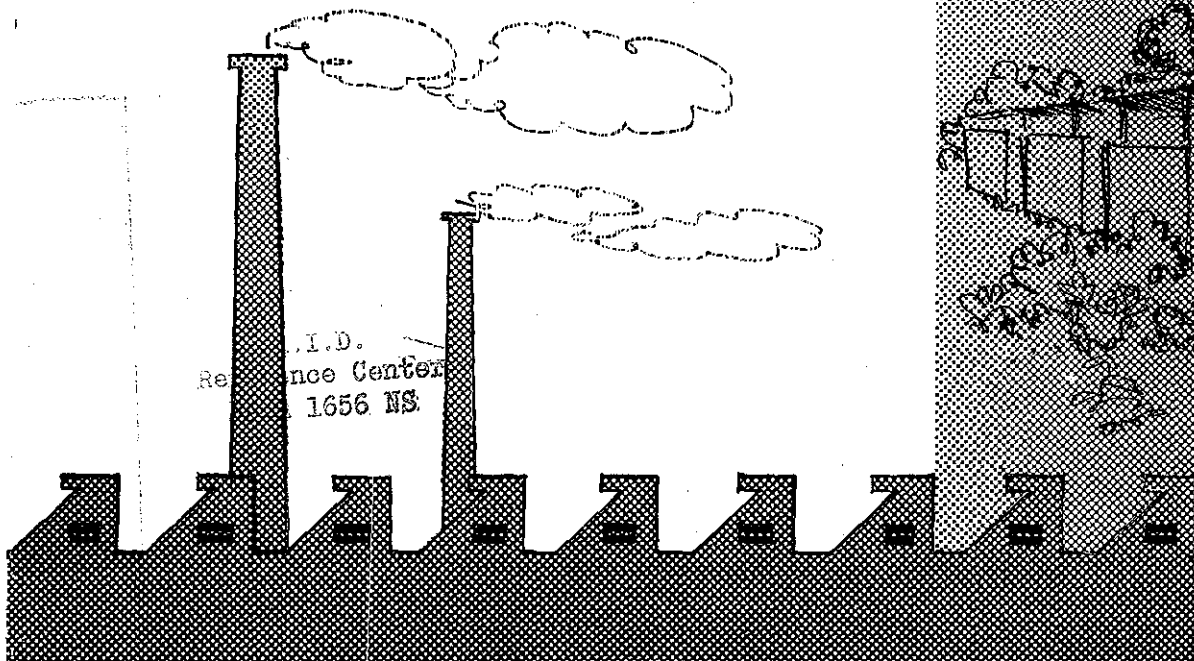
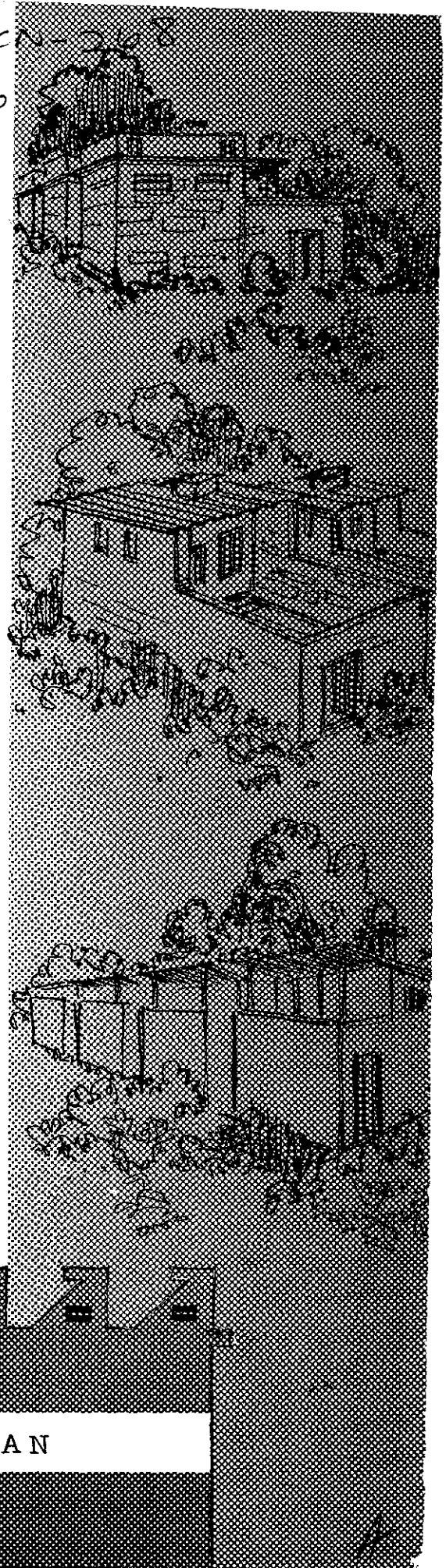


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Report on WORKER HOUSING in KARACHI



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George Duggar and Dudley Winterhalder. 1968.

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PROBLEMS OF WORKERS HOUSING, KARACHI

REPORT OF THE HOUSING TEAM

PREPARED DURING SURVEY CONDUCTED

OCTOBER 2, 1967 to NOVEMBER 12, 1967

MEMBERS OF THE TEAM:

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Urban Affairs, University of Pittsburgh**

**Eugene M. Mortlock, Chairman-of-The Board,
First Federal Savings and Loan Assn. of
New York**

**Dudley Winterhalder, Architect, United States Department
of Housing and Urban Development**

United States Agency for International Development

1968

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OUTLINE OF THE SURVEY

**PART ONE: Introduction with Findings
and Recommendations**

PART TWO: Field Trip Reports

d

PART ONE

INTRODUCTION WITH FINDINGS AND RECOMMENDATIONS

e

CONTENTS

	<u>Page</u>
FORWARD	1
MINISTRY PROPOSALS FOR S.I.T.E.	3
S.I.T.E. (Description)	3
RESUME OF FINDINGS AND RECOMMENDATIONS DIRECTED TO THE GOP AND KARACHI DEVELOPMENT AUTHORITIES	5
FINDINGS AND RECOMMENDATIONS	7
TECHNICAL ASSISTANCE -- A NECESSITY	19
POTENTIAL ACHIEVEMENT	19
TECHNICAL ASSISTANCE REQUIREMENTS	20
LOANS TO NEW INSTITUTIONS	22
ORGANIZATION IN THE PLANNING STAGE	23
COMMENTS ON LEGISLATION	23

CHARTS

CHART 1	Transfer of Responsibilities from S.I.T.E.	15
CHART 2	How a System of Annual Grants Could Make Housing Available to Lower Income Families	16
CHART 3	How the Creation of a Savings and Housing Bank Permits Land-and-Home Ownership	17
CHART 4	Sketch Outline of Urban Housing Finance	18
CHART 5	Probable Organizational Relationships	25
CHART 6	Possible Organization with Technical Assistance	26

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FOREWORD

Following discussions between USAID, Mr. N. M. Uquaili, G.O.P. Minister of Finance, and other interested parties, AID requested an urban development team for a visit to Pakistan. As a result, the Department of Housing and Urban Development, through its Division of International Affairs, provided Professor George S. Duggar, Director of Program in Urban Affairs, University of Pittsburgh, and Mr. Dudley Winterhalder, Architect of the Housing Assistance Administration under PASA. The United States Savings and Loan League provided the finance member of the team (also under PASA) in the person of Mr. Eugene M. Mortlock, Board Chairman, First Federal Savings and Loan Association of New York. The team left for Pakistan on October 4 and completed its field work on November 13, 1967.

The report discusses the workers' housing problem in Karachi, and programs that have been devised to cope with them, particularly with respect to the industrial workers at the Sind Industrial Trading Estate.

The principal objective of the report is to formulate an initial feasibility study for a model community of industrial workers' housing shops and recreation areas, based on an assessment of prevailing conditions in Pakistan and Karachi. The scope of physical planning and architectural recommendations are the result of a brief study of existing planning and housing standards, materials, construction methods, self-help schemes and an appraisal of the local building industry as related to the development of low-cost housing.

Our study began with briefings at Washington, D.C. by Messrs. Rod Boyd, Thomas Callaway, William R. Gage, Roy W. Potter and A. H. Pursell. In Karachi, which was our headquarters, services were provided under the direction of Gilbert Lane. Messrs. Leslie M. Burgess, Garth Jones and Raymond Malley handled our orientation at Lahore. We want to thank all these persons and their immediate staffs, and many others at AID and HUD whose cooperation was essential to our work.

During the pre-departure orientation by AID/Washington, the team was informed of the two emergency refugee housing programs known as North Karachi and Korangi. The 44,500 units and related planning activity by Doxiades Associates were funded by AID and the Ford Foundation (Korangi) through the National Housing Settlement Agency. It was the intention of AID that the team should benefit from the earlier experience, and that our recommendations should indicate areas of improvement relative to any future involvement of the Mission in urban development.

Before focusing attention on Karachi, a week was spent visiting government officials and housing projects in Lahore and Islamabad.

The experience provided considerable insight and perspective for some of the problems confronting a developing country. The new capital at Islamabad is an outstanding achievement for a relatively new nation, both from a planning and architectural standpoint. It will set a high standard for the many other rapidly developing cities in Pakistan. A preliminary reconnaissance of Dacca indicated that a special study would be required at the proper time, if a similar program were to be attempted there. Mr. Allan Furman, Acting Director, and Messrs. Howard Turner, Leon Margosian, Hugh Rose, Kenneth Tollenaar, and Ralph Holben were of the opinion that something could be accomplished. Mr. Holben provided a copy of his report, "The Establishment of Savings and Loan Associations in Pakistan."

We wish to acknowledge our appreciation to the many officials who have helped us to obtain the needed background and who were too courteous to ask the unspoken question why a group of outsiders should presume that in a few weeks it would acquire sufficient mastery of a difficult problem to contribute to its solution. Most of the data and information used in this report was provided directly or indirectly by the Karachi Development Authority whose assistance and cooperation have proved invaluable. The professional guidance received from the K.D.A. staff, and many others, was of a very high caliber, but equally important was the manner and sincerity with which it was given. Neither will the friendliness and hospitality of the Pakistani people be soon forgotten.

Special thanks are due to two organizations, the Karachi Development Authority and the Planning Commission of Pakistan at Rawalpindi. To the heads of their organization who made possible our welcome there and to Messrs. Khalid Shibli and M. Ahmed Ali, respectively, who arranged our program and interpreted Pakistan to us day after day, we want to express a special note of appreciation.

MINISTRY PROPOSALS FOR S.I.T.E.

In response to a request of the Government of Pakistan, the USAID Housing Team studied the feasibility of certain base-line proposals put forth by Mr. N. M. Uquaili, the Minister of Finance, for housing industrial workers within the jurisdiction of Sind Industrial Trading Estate (S.I.T.E.). In accord with the Minister's suggestion, the Team considered this area as a test for considering the feasibility of the base-line ideas for other industrial estates and other urban areas of Pakistan. It also identified some requisites for such a spreading and continuing program.

The Base-Line Proposals

The following were taken as the base-line proposals:

1. House as many as possible of S.I.T.E. workers in a good, attractive environment within S.I.T.E., using land set aside for labor colonies or otherwise not dedicated to industrial use.
2. Include many types of residential buildings and all community facilities, especially shops, and assume that the ground floor of some structure will be appropriate for some of these.
3. Utilize capital to be supplied by the industries with plants at S.I.T.E., and assume that government funds also will be provided.
4. Identify necessary changes in finance, banking and public administration which could induce such financial participation on a sound basis.
5. Explore ways to encourage home ownership and consequently savings and self-help by the occupants.

S.I.T.E.

The Sind Industrial Trading Estate (S.I.T.E.) is a roughly cigar-shaped jurisdiction of 4,000 acres along the Western Railway about three miles northwest of the center of Karachi, across the Lyari River. Surrounded by "Jugglies," the largely built up industrial area, together with the vacant non-industrial land (about 1300 acres) constitute an island where perhaps one-sixth of West Pakistani industrial employees work in a compact district especially well provided with utilities in an orderly layout.

The non-industrial area near the northern corner is cut by a rocky ridge generally paralleling the main axis of S.I.T.E., but dipping southeast and then north again to carve out an empty, almost flat

high valley floor of about 220 acres called Labor Colony No. 1, leaving to the south about 410 acres in Labor Colony 2, and the rest of S.I.T.E. The rocky hills are almost equal in mapped area to the total of the two labor colony areas.

S.I.T.E. is only a very special one of 50 local jurisdictions in the Karachi areas, many of them, like S.I.T.E., nominally within the boundaries of the Karachi Municipal Corporation. Most of them, like S.I.T.E., were devised as development schemes but continue as partial local governments, utilizing rents and fees instead of taxes, and lease requirements instead of ordinances. A board of seven, including four government nominees (the managing director and three industrial tenants) is responsible to the government for the administration of S.I.T.E.

Criteria

In selecting findings and recommendations to report here, we have accepted four criteria:

1. That we should report on the feasibility of the "base-line" proposals outlined by the Minister of Finance.
2. That (a) if it would be necessary to go beyond S.I.T.E.'s area to house some of the S.I.T.E. workers, or (b) if it would be advantageous to house other workers there, or (c) if advantageous to permit both of these policies, then our findings and recommendations should serve a more comprehensive program, as well as the base-line proposals.
3. That relevant important aspects of the housing situation peculiar to Karachi be identified in case that, in accord with the suggestion of the Finance Minister, the findings and recommendations might be used with appropriate modification in framing policies for additional trading estates and urban areas.
4. That in a brief report based on a month's study we can only hope to direct attention to what seems to us to be the critical questions. While our findings and recommendations are stated rather flatly, we fully appreciate that they can only channel discussion, not end it. We offer statements with the intent that they will elicit the right questions.

RESUME OF FINDINGS AND RECOMMENDATIONS DIRECTED TO
THE G.O.P. AND KARACHI DEVELOPMENT AUTHORITIES

1. The present S.I.T.E. (Sind Industrial Trading Estate) housing area is well chosen, and the base line proposals for the non-industrial area are sound. While the construction of a city of 200,000 is feasible, the area will not accomodate all proposed future expansion.
2. A large percentage of low-income families cannot afford acceptable "standard" housing without subsidy.
3. A specialized housing agency is necessary to assure adequate production of workers' housing by cooperatives, firms and individuals.
4. New and strengthened financial institutions are needed to induce savings and finance home construction.
5. Careful planning is necessary to make the best use of available land, climate and vistas, and to assume workable neighborhood units suited to the needs and desires of the community.
6. A minimum standard unit should contain two rooms and veranda with cooking and sanitary facilities to provide minimal privacy and prevent instant slums.
7. A separate department should be formed to encourage self-help and mutual help in order to tap available human resources and provide housing for lower income families.
8. Financial assistance in the form of long-term subsidies should be provided for both home ownership and rental programs through normal financial institutions, based on ability to pay.
9. No blanket restriction should be placed on luxury housing, which is minimal and provides a necessary service.
10. Municipal services to S.I.T.E. must be increased, and revisions must be made in revenue patterns to provide adequate services to industrial sites and a 200,000-person residential area.

11. Construction of the city should be phased, and early experience should be used to modify later developments to assure the success of the project.
12. The creation of a land development and housing authority as wholesaler of residential land is necessary to clarify and supplement the roles of K.D.A. (Karachi Development Authority) and related institutions.
13. A new master plan for Greater Karachi should be prepared immediately in order to increase densities, control development patterns, and attack the growing transportation problem.
14. Architectural design and planning must involve the people in a "client" relationship in order to prevent the underuse and misuse of an imposed environment.
15. Additional trained professionals are needed to provide a workable "depth" in development planning and execution.
16. A technical reference and research library is necessary to provide data for the improvement of design, construction techniques, and a broadening of the materials industry.

FINDINGS AND RECOMMENDATIONS

1. S.I.T.E. is the best large area for industrial housing in Karachi. The number of workers employed presently at S.I.T.E. is too great to be housed within the designaged "labor colony" areas at anything approaching acceptable standards. Even if permissible densities are raised from 250 to 315 persons per acre (as we think appropriate) the area cannot accommodate the number of persons projected for future employment with S.I.T.E.
2. Approximately 72 percent of low-income families in the area cannot afford "standard" housing without grants in aid from such sources as the industrial community. With the minimum wage for unsubsidized standard housing amounting to approximately Rs. 300, the following table illustrates the problem.

<u>Type of Employment</u>	<u>Wage - monthly</u>
Unskilled	90 - 140
Semi-skilled	120 - 160
Skilled	175 - 300

Two families per unit and an average of three persons per room are typical of the thousands of "juggie" dwellings adjoining S.I.T.E. and along the river.

With housing policy, institutions and methods of finance as they are at present, even those workers who might afford acceptable shelter cannot find new housing.

3. A skilled and specialized housing agency is necessary to assure an adequate production of housing for industrial workers. The mobility of labor where a job choice exists and the small-scale housing construction potential of individual non-construction industries are among the reasons why only two of 59 industries have taken advantage of 112 acres allotted to them for this purpose. In addition, the management of completed housing, with its inherent problems, is not popular with industry.

For the creation of an effective authority for organizing, building and managing industrial housing at S.I.T.E., there are apparently five possible alternatives:

- A. A special housing corporation to build and manage S.I.T.E. housing only.

- B. A special housing corporation to build and manage housing within the jurisdiction of the Karachi Municipal Corporation.
- C. Further increasing the responsibilities of K.D.A. in the housing field by assigning it the job.
- D. A provincial government agency to build and manage a number of industrial estates, including that at S.I.T.E.
- E. Continuing to hope that industrialists individually and in cooperation with S.I.T.E. will accomplish the task.

While the choice of organizational form is a matter with many variables for consideration, the resulting institution should be an agency of the G.O.P. and have as its managing director an outstanding career civil servant experienced in matters related to housing.

The Authority should have the power to incur debt, to develop, charge rents and fees, transfer leases, receive, own, and manage property, contract for services, and have authority to allocate appropriate functions to the Municipal Corporation and other appropriate bodies, and to negotiate with them. It should be responsible for non-industrial leases now held by S.I.T.E. and the industrialists. K.D.A. should provide town planning regulation, with its primary goal the solution of the housing problem of S.I.T.E. There would be close coordination with the home finance association outlined in item 4, and with other related agencies.

- 4. One of the basic factors contributing to the problems of providing housing at S.I.T.E., as elsewhere in Karachi, is the weakness of credit facilities. New and strengthened financial institutions are needed for savings and home finance. These would attract savings from industrial corporations, life insurance companies, government employees and others, as well as home seekers. Incentives should be provided for regular saving, with loans being made primarily to industrial workers, cooperative societies and firms for family housing.

In the early stages the Government of Pakistan could encourage this effort to mobilize savings by lending to the association on some matching basis, such as one rupee for each three deposited by the public. Such loans could be repaid when growth reaches a level pre-determined as satisfactory. In addition, special debenture issues are recommended as a means of providing base capital savings which would earn interest at variable rates determined by competitive conditions.

An added inducement, savings accounts within given limits (possibly 10,000 to 20,000 rupees) should be insured on a permanent basis by an agency of the Government of Pakistan. This agency should be capitalized by the government or the State Bank, with the savings and housing associations paying an annual premium of 1/8 of 1% of their total insured savings.

5. While the location of residential land at S.I.T.E. is excellent, careful planning is necessary if the community is to provide a workable and pleasant living environment. The local way of life and the terrain demand an organized plan rather than a rigid grid.

Easy access to small neighborhood shopping complexes which are part of the social, as well as economic life, easily reached schools, places of worship, clinics, community centers and parks within a plan that follows the contour of the land and retains natural focal points creates an environment in pleasant contrast to the rigid grid. Arcaded buildings carefully related to small plazas and green areas, oriented to take advantage of prevailing breezes and natural vistas form centers for "local action" with which a neighborhood can identify itself. The free pattern of dwellings and streets that results is visually interesting, and in addition is less costly as it reduces the need for cut and fill, bridges, etc. A more intensive use of the land with the economies of higher densities is possible with great variety and without the appearance of crowding normal to long straight rows of structures.

6. It is proposed that two rooms with a veranda and/or small kitchen, bath and water closet be adopted as a standard. The one-room standard used in the Displaced Persons Colonies (Korangi and North Karachi, of which some 90,000 have been built) does not allow for the separation of children and adults, and is a poor basis for the two-family-per-unit situation.

Careful planning, management and maintenance are necessary if new communities are not to become slums in the near future, requiring additional large sums for rehabilitation and renewal.

At a slightly higher rental, three rooms should be provided for those with incomes of Rs. 200 - 300 per month. The burden of increased payment would be eased where two families occupy a unit.

A variety of building types should be provided, with a much smaller percentage of single-story dwellings than are found in Karachi as a whole.

Economy of utilities and nearness to transportation and shopping may well change the habits of people to allow acceptance of two-story row houses and five-story walk-ups. This is one of the prices which must be paid for the advantages of industrial growth and urban living.

7. A separate department should be established to provide administrative and technical assistance for self-help and mutual-help housing programs. As the limited resources available are insufficient to meet the housing need through conventional means, ways must be found to tap the human as well as economic resources of low-income families.

The department proposed would act as a clearing house for information on self-help methods from abroad as well as providing data on the existing activity in this field already underway in Pakistan.

Dwelling plans, construction and maintenance manuals, data on financing techniques and organizational procedures should be available to interested groups or individuals free of charge.

Self-help housing assists in channeling the reserve of available manpower and promotes individual pride of accomplishment, provides incentive for those willing to improve their environment, develops skills in construction and reduces the amount of cash reserve normally required for home ownership.

8. Additional financial resources should be channeled into grants in aid of housing for low-income families. These should be in the form of annual subsidies with the amount provided for a given family's housing increasing on a sliding scale inversely in relation to income. The grant would therefore cover the difference between a family's ability to pay and the actual cost of shelter. With all grant funds managed by the housing authority, assistance would be available for rent or purchase of housing.

The authority would commit itself to future subsidies through a financial institution, enabling the institution to make loans to low-income families, with the total based on ability to pay, plus the promised subsidy. The subsidy payments and terms of the loan would be adjusted as the family income changed.

As potential sources of such subsidies, we have identified the following:

- (a) Monthly grants by industrial firms to their employees based on 2.5 to 5 percent of payroll.

(b) Annual grants of at least one-half of net revenue from KDA's land sales.

(c) Grants on some matching basis from G.O.P. funds.

Where firms invest directly in housing, grants payable would be reduced accordingly.

Of the above sources, that of K.D.A. land development revenues is potentially the largest. As it is also the most complex conceptually, it is outlined in a separate annex.

9. We recommend that there not be a blanket restriction on construction of luxury housing. The volume of such construction is small, and a large proportion would have to be built in any case to serve the staffs of foreign missions, corporations and government officials.

A market (auction) approach to land disposition would discourage purchase of large tracts for single-family occupancy, and would accomplish more than well intentioned but less effective restriction.

10. Municipal services must be greatly increased and revisions made in revenue patterns if 200,000 persons are to be adequately serviced. Although it is within the Karachi Municipal Corporation, the S.I.T.E. area receives only nominal services from this body. S.I.T.E. uses its own authority to supply the necessary services to the industrial area and assesses charges to the leaseholders.

The tax on rental value is said to consist of direct charges plus a 10% provincial collection. Other charges, presumably collected by the Province, and divided among S.I.T.E., K.M.C. and the housing corporation, will be required as basic revenue supporting local authority. To be effective, arrangements would have to be made to divide revenue raised within the whole of the S.I.T.E. area between services for the industrial and housing authority areas.

Means must be found to provide the people of the area with a voice in local government through representational bodies. If the Housing Authority were part of a provincial operation, the cantonments provide a precedent for representational bodies.

11. The construction of the city should be carefully phased to allow study of the success of the first portion as a living environment. This data would then be used to modify plans for later stages in order to assure the success of the larger community.
12. The creation of a housing authority as wholesaler of residential land for industrial housing should clarify the relative roles of K.D.A. and other related institutions.

At present, K.D.A. is unique in that it includes most of the elements of land development and services such as water, sewer and streets. Because it covers such a wide geographic area, it has had to find ways of working with decentralized entities such as the "Housing Cooperative Societies." This latter take over at a late stage in land development and continue into the management phase. The lack of an intermediate wholesaler, such as a housing authority, has caused some difficulty which accounts in part for the apparent weakness of these cooperative societies.

Whatever form the housing authority at S.I.T.E. may take, it will be both wholesaler and retailer of land leaseholds since it will build and manage some structures as rental property and will lease other land for construction. Its effectiveness will be dependent to a great degree on the effectiveness of K.D.A. as the producer of urban land. This does not mean that K.D.A. should be the housing authority. On the contrary, such K.D.A. activity at isolated sites would tend to compete with its other utility service customers, and perhaps conflict with its role as town planning review agency for all schemes.

Whether at S.I.T.E. or in a new city which may be built in the Karachi area, a high level of coordination will be necessary between K.D.A. and other development bodies. For this reason, although it is outside the specific scope of this assignment, we strongly recommend the creation of a ministerial level office responsible for housing policy to provide a framework for all development activity.

13. It is imperative that a master plan should be prepared for the greater Karachi area, and that owing to the time required, this activity should commence immediately. Otherwise, benefits which normally accrue from dynamic industrial growth will be wasted in soaring costs of maintaining basic physical and social services for a burgeoning, ill-housed population.

Karachi has spread horizontally, and in doing so has adhered to the existing master plan which focused new development on relatively flat land, leaving the hills and more rugged terrain as greenbelts. This planning approach should be reappraised, and serious thought given to developing at least some of the higher elevations within the city. It is admittedly more expensive, but perhaps not so much as continued horizontal expansion. Even before completion of a revised master plan, interim studies would facilitate the proper location of additional low-cost housing.

Low density has forced housing further out, and has created a transportation problem. This artificial shortage of land and resulting expansion has called for more and more streets and roads which trend will call for the expenditure of vast sums. A logical alternative is the increase of population densities in the central city and around industrial areas.

14. Design concepts must suit the life of the community. To this end architecture should reflect the character and activities of the people. A flexibility of standards is thus desirable in order to allow logical change as families become "urbanized" and values change.

Architecture and planning must accommodate the past as represented by Pakistan's cultural heritage and social life.

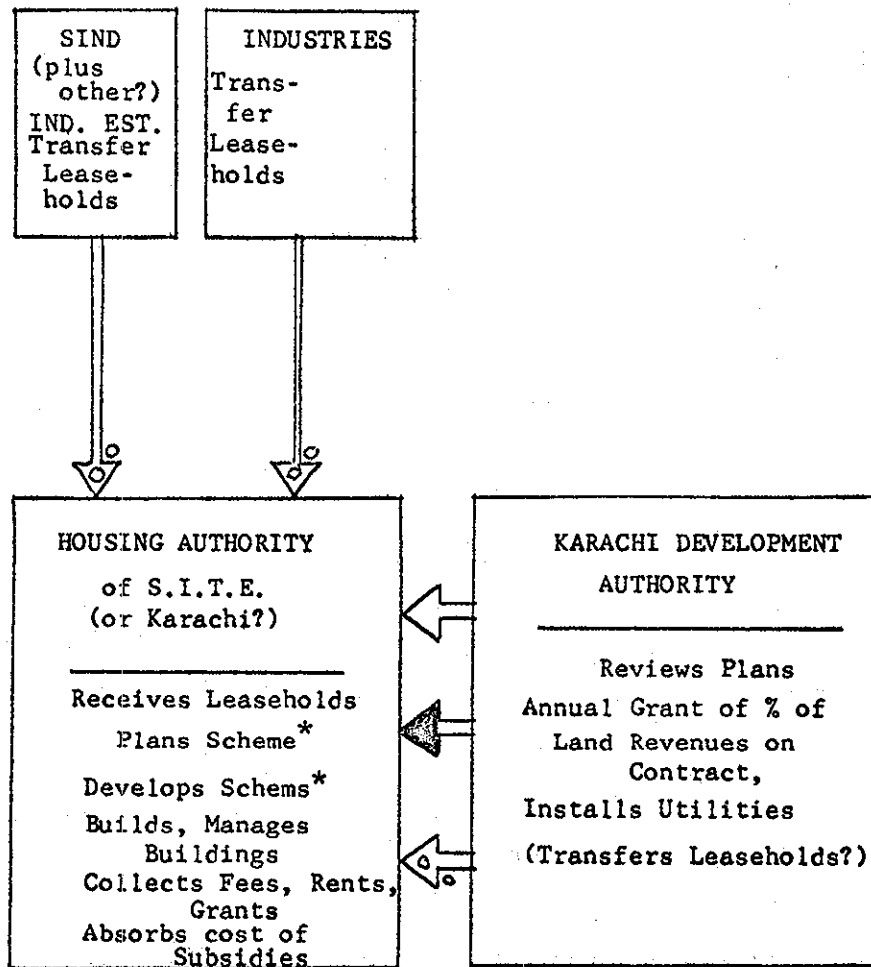
Housing and related amenities should invite, serve and encourage people who are experiencing a breakdown of rural customs as they become part of a new urban environment. This means that planning must be done with rather than for the populace. This will discourage the underuse and misuse of an imposed environment. This partnership between citizens groups and planners and designers will create something which is valued because it reflects the needs and interests of those using it.

15. Additional professionals in the area of housing and planning must be trained. The present veneer of extremely able professionals is clearly too thin in Pakistan. Among the skills which must be strengthened in depth are structural, mechanical, soils and sanitary engineering, architecture, city planning, urban development administration, housing management and experts in housing economics, financial administration and urban community development. The impact of technical training and experience is great. Long-term commitment is required to allow a comprehensive training program and the building of an adequate professional corps capable of both making and implementing development decisions.
16. Improvement in design and the expansion and diversification of a building industry depend upon the availability of technical data. To this end a technical reference and research library should be established. Planning, design, methods and techniques of construction, administration, building materials, soils, mechanics, landscaping, engineering and sociology should be among the subjects covered. Of special value would be periodicals and scientific publications to allow those involved in planning and building to take advantage of the latest international developments.

Such a library might form the nucleus of an Institute of Environmental Design incorporating the P.C.S.I.R. (Pakistan Council for Scientific and Industrial Research), and could be financed from both public and private sectors. The institute should sponsor and encourage development of new materials and modernized techniques through its own resources and through grants and subsidies to industry. It should also participate in trade fairs, exhibitions, and in the planning and construction of actual demonstration projects incorporating the latest achievements in building technology appropriate to the local scene.

CHART 1

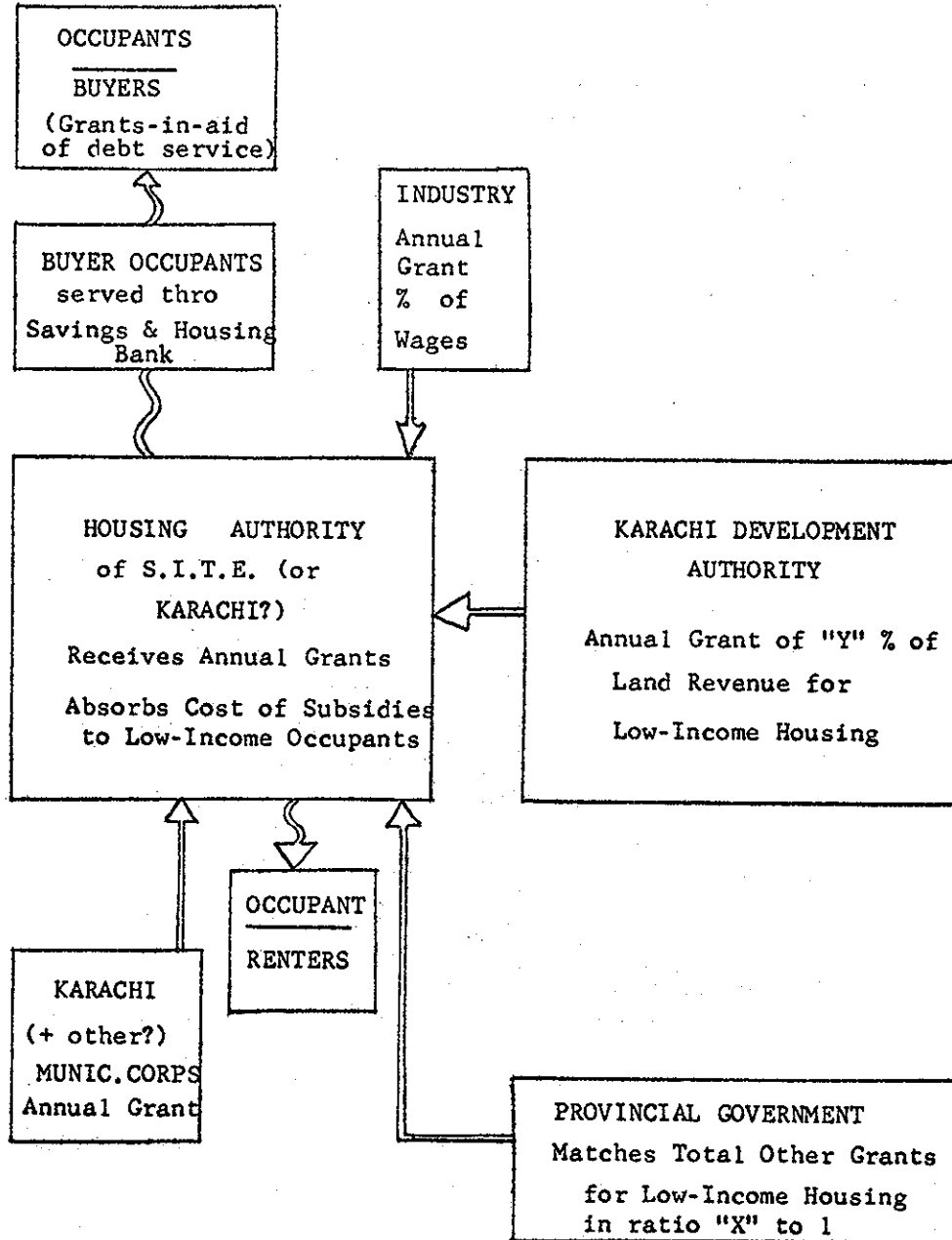
(RESPONSIBILITIES)
TRANSFER OF (RESOURCES) FROM S.I.T.E.,
K.D.A., AND INDUSTRIES AT S.I.T.E. TO A
NEW HOUSING AUTHORITY



*May engage S.I.T.E. or K.D.A. or contract with firm.

CHART 2

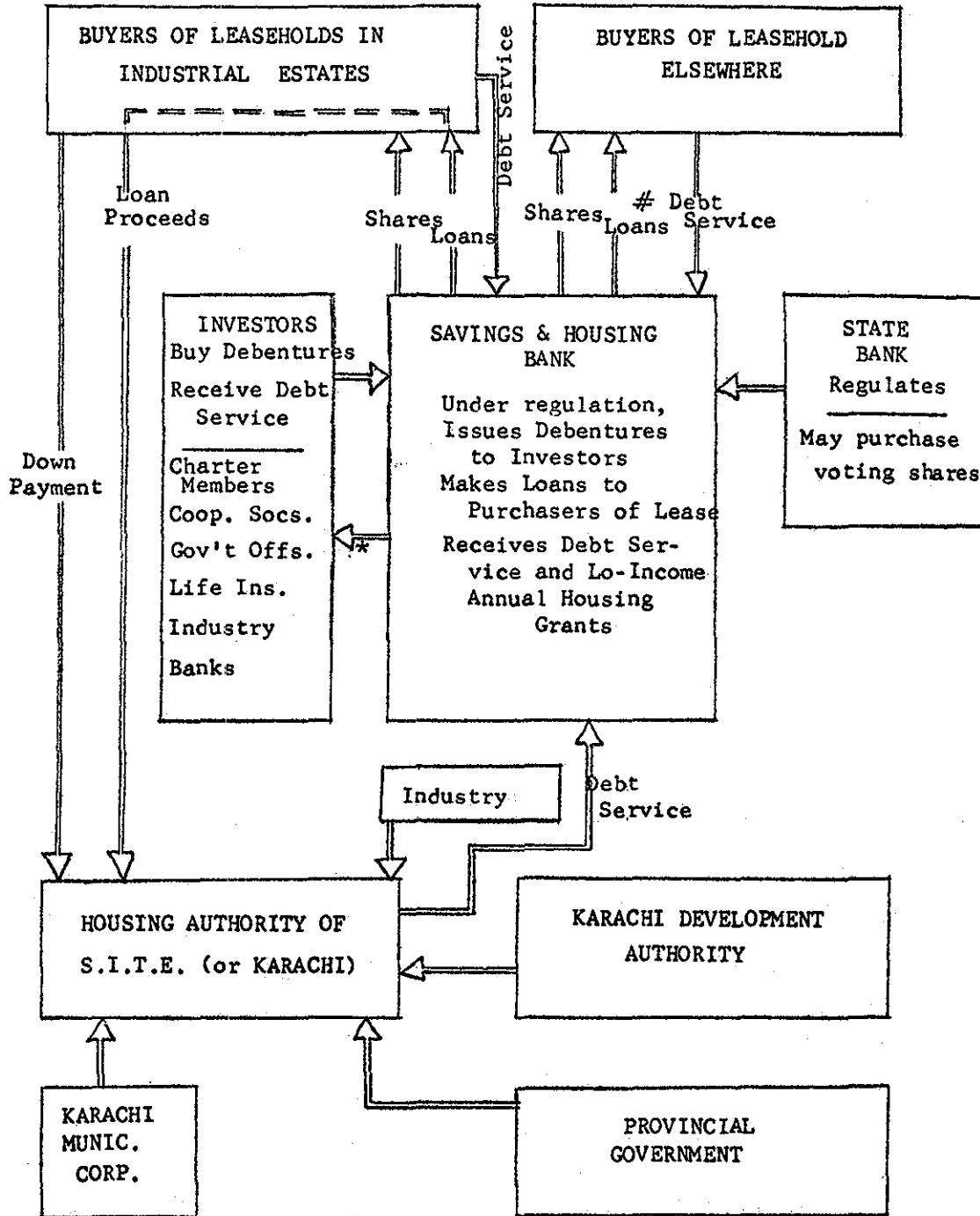
HOW A SYSTEM OF ANNUAL GRANTS COULD MAKE
HOUSING AVAILABLE TO LOWER INCOME FAMILIES



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CHART 3

HOW THE CREATION OF A SAVINGS AND HOUSING BANK
PERMITS LAND-AND-HOME OWNERSHIP FOR THOSE
AFFORDING ANY DEBT SERVICE



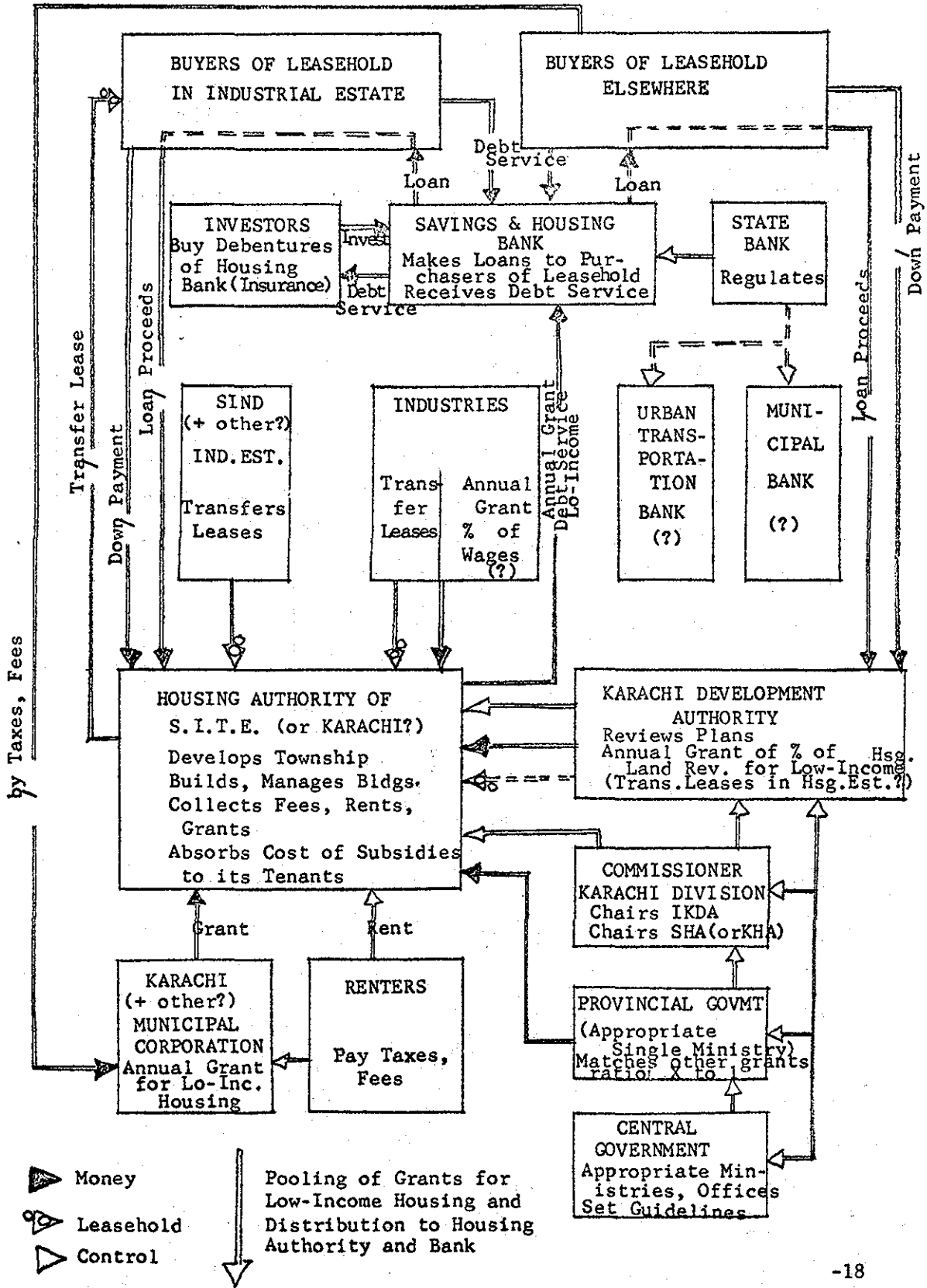
* Central Government may guarantee repayment.

Mortgage loans and, with other banks, construction loans.

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CHART 4

SKETCH OUTLINE OF URBAN HOUSING FINANCE



TECHNICAL ASSISTANCE -- A NECESSITY

The effectiveness of the \$3.5 billion program of economic assistance to Pakistan is difficult to measure in comparative terms. In spite of this, one cannot avoid the startling contrast between individual projects where technical assistance and follow-up have varied to a marked degree. An area which has suffered greatly has been the geographically scattered and piecemeal effort in assisting the building of the Karachi Metropolitan community. In addition to a lack of follow-through, it is apparent that the lack of technical assistance to provide an understanding of the city as a way of life and to provide appropriate administrative organizations has been the basis of limited success in urban programs to date.

As an example, the North Karachi and Korangi projects were bold and dramatic in concept. The 44,500 units actually built house a couple of hundred thousand persons. Unfortunately, these projects are at the far extremity of what was intended in 1951 as the limit of ultimate expansion. This premature development failed to benefit from its earlier construction in later planning. Coupled with a lack of follow-through, every major metropolitan problem was compounded. The basic provision of a healthy environment has been thwarted by incomplete water and sanitary systems which have left tens of thousands of shower stalls, kitchen spigots and water closets unconnected and unusable.

The evolution of a city is a concept which requires detailed technical interpretation not only to device projects, but to see that each is built and managed in a sound manner in keeping with the desired objective.

These observations are not intended to downgrade the work of very competent professionals in Pakistan. It is necessary, however, to recognize the fact that both the limited number of technicians available and a lack of experience with the type of institution needed to make a long-range comprehensive program feasible makes technical assistance imperative if the GOP is to realize a meaningful return from the tremendous investment that has been and is being made.

POTENTIAL ACHIEVEMENT

With the program of technical assistance and loans as outlined, there is potential for real achievement through significant long-range orderly urban development which can provide not only permanent shelter and home ownership and rental availability, but do so on a sound economic basis. While a monetary value can be placed on the housing units and other amenities produced, the overall social, economic and political

benefits are beyond measure. No greater stake in a stable community or incentive for improved economic activity exists than ownership of adequate housing.

Specific achievement over a relatively short period would be the housing of some 200,000 people, with a long-range benefit to both planning and implementation through the creation of important new institutions. These would not only benefit S.I.T.E. and other development in Karachi, but would act as models and a vehicle for development throughout Western Pakistan.

Other measurable benefits include a reduction in travel expenses for some 50,000 workers, and an annual increase in rental values of some \$6,000,000. Through the new institutions, savings and self-help activities should at least equal the total cost of development, less subsidies. The stabilizing influence of payroll taxes and market evaluation of land would reduce inflation and in a very real sense increase buying power, or real GNP.

Only the proposed design competition departs from the "conservational" character of the proposed program. This device is intended to draw attention to the problem and point up possible solutions to urban physical development through a dramatic demonstration. This effort should stimulate the interest and activity of both professional and layman, and serve as an effective public relations device.

TECHNICAL ASSISTANCE REQUIREMENTS

The following recommendations are intended to identify elements of technical assistance required to make the necessary urban program a reality and to help in establishing the institutions on which the success of the earlier refugee housing projects as well as S.I.T.E. and any future programs depend. To make technical assistance successful, loan funding to support the necessary institutions would be required from a variety of sources.

Technical assistance in three interrelated areas should be provided as follows:

1. The formulation of a plan for a new city at S.I.T.E., including a general layout, detailed precinct plans, plus the design of living units and other structures through a competition based on standards derived from a "survey of experience."
2. A detailed financial feasibility study of housing debt service, land economics, taxes and subsidies relative to S.I.T.E. and applicable to existing projects.

3. Formation and management training relative to a Housing and Land Development Authority, a Savings and Home Finance Institution and related deposit and mortgage institutions.

To accomplish these goals, the following technical assistance is required:

Long Term

1. An Urban Development Generalist. He would advise the GOP, and the Karachi authorities on all policy and operational matters related to urban development. He would coordinate the efforts of the other technicians assigned to specific projects such as S.I.T.E.

The Urban Generalist would administer the design competition, would establish the initial contacts with both regional and municipal authorities, would negotiate matters relative to project policy and direction and would determine the phasing in of project technicians.

2. An Aided Self-Help Housing Expert to be based in Karachi. The ASH advisor would carry out research, train staff, assist in design and coordinate self-help and low-cost housing projects generally in the new S.I.T.E. city. He would assist with other programs as needed.
3. An expert in Land Development and Housing Agency Administration and Legislation would be needed to guide the formation of the various institutions necessary to a meaningful long-range program. These would include the Housing and Land Development Authority at "S.I.T.E. City," a savings and home finance institution, deposit insurance and possibly mortgage insurance agencies. The first would be a specific ongoing project, while the second would service S.I.T.E. and further development at North Karachi and Korangi, etc. The insurance agencies would, of necessity, be a central government function and could eventually serve development on a national basis.
4. An expert in Home Finance would provide guidance for the creation of a savings system which is necessary to finance meaningful long-range programs. He would work with the advisor described above in guiding legislation, training staff, and generally building on the limited existing expertise in this field.

His guidance would cover such areas as insurance operations, regulations enforcement, records systems, handling of defaults, etc.

Short Term

1. An expert in Land Valuation would be of assistance for three months, and should be provided with clerical assistance. He would work with the land development operation in providing data for realistic land sale and land tax systems.
2. An expert in Payroll Taxes would make a study of the present payroll structure. He would make recommendations relative to a payroll deduction system similar to the "social security" method. A counterpart should also be provided by the Finance Ministry.
3. A Development Finance expert should do a survey of family incomes and characteristics. Using information provided by the Land Evaluation expert, he would make recommendations relative to desirable, or achievable, levels of municipal services.
4. A Records Management Advisor would work with the Land Development and Savings and Home Finance operations in formulating a system and consulting with local staff.

LOANS TO NEW INSTITUTIONS

1. The first savings and home finance (bank) association approved under the system -

A. Base Capital (Reserve)

Government of Pakistan and private corporations with the participation of other institutions should provide loan funds to form a base capital of \$600,000.

B. Savings Capital (Lending)

The Government of Pakistan should provide one dollar for every six dollars of passbook savings mobilized from the public. This matching loan should be provided for a maximum of ten years at low interest.

Depending upon the success of the first institution, a determination would be made as to whether similar loans should be made to subsequent independent savings and home finance institutions and/or to any government agency established to insure mortgages.

2. The Housing and Loan Development Authority

A. Repayable from General Fund -

The GOP, private corporations and other institutions should provide long-term low-interest loans to the Housing and Loan Development Authority for site development. These would be repayable from the general fund of the authority, including its share of taxes on real property and returns from the sale of land leases.

B. Repayable from Subsidy Funds -

The GOP, private corporations, and other institutions should make available shorter term low-interest loans to be repayed from the proposed subsidy funds. These would include the proposed special payroll tax and the Authority's share of revenue from KDA's land sales.

ORGANIZATION IN THE PLANNING STAGE

None of the foregoing proposals can succeed unless there is close coordination of all activities. While Charts 1 through 4 describe the functions to be performed, Chart 5 indicates the lines of authority as they are most likely to exist if the proposed institutions are created.

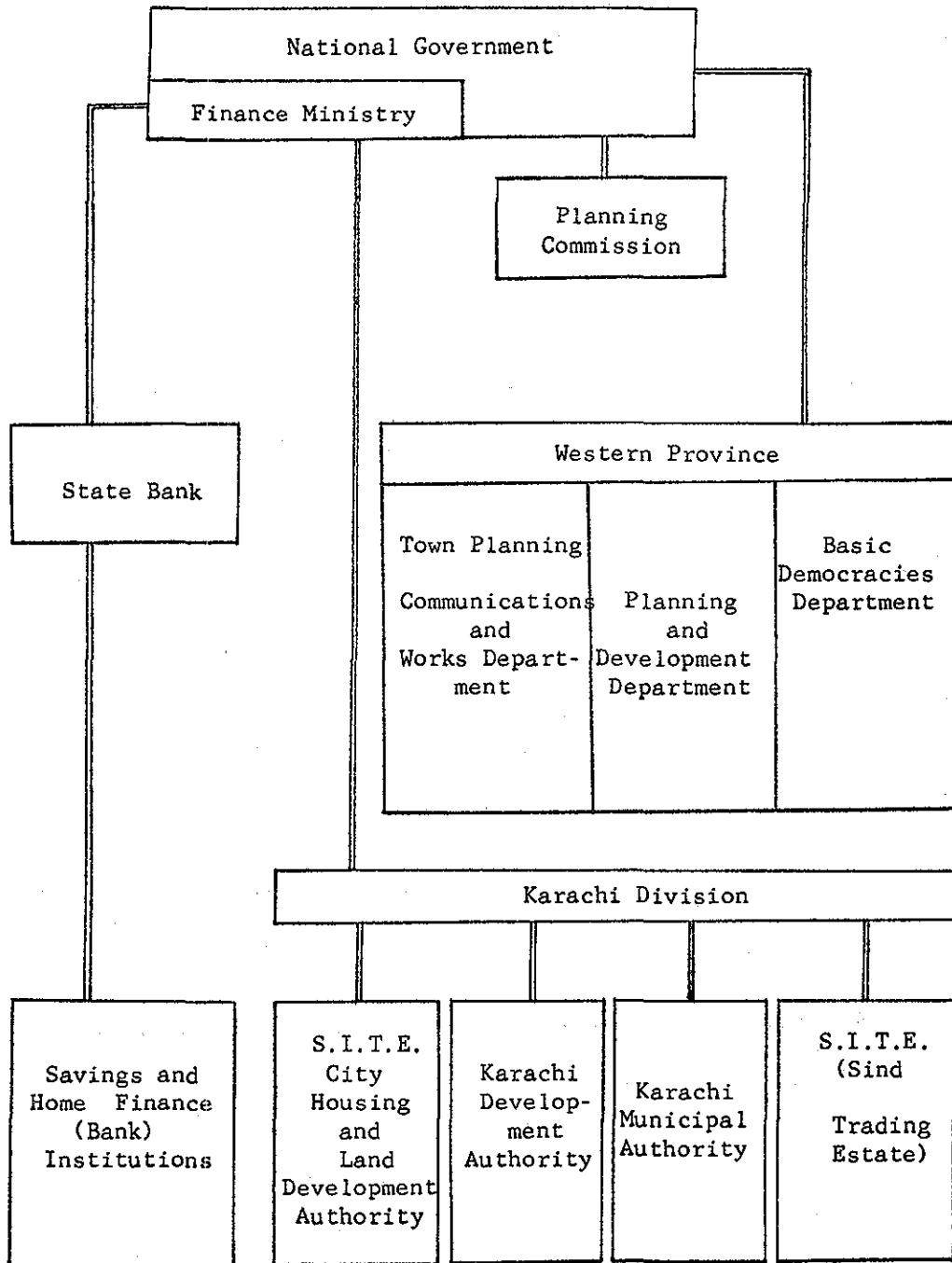
As two of the key organizations do not now exist, the KDA can take primary responsibility for studies as well as the preparation necessary prior to the choosing of a design team. Drafting of legislation and regulations for the savings and housing institutions should be carried out through the State Bank. The Urban Development Advisor would work with officials at the national level, including the Finance Ministry and the Planning Commission. If possible, staff from the latter should be posted to KDA to assist with the feasibility studies and related "institution building" processes. Chart 6 indicates possible relationships of the relevant organizations during the initial period.

COMMENTS ON LEGISLATION

The time has come for the preparation of detailed draft legislation relative to the necessary savings and home finance and insurance institutions. The subject has been thoroughly discussed in Pakistan. Prior to this team's visit, International Project Directors of the National League of Insured Savings Association had been sent out on three occasions to advise on the formation of associations.

Two existing organizations, the East-West Savings, Loan and Building Cooperative Association, Ltd., and the House Building Finance Corporation, while forming the basis for meaningful activity, lack both capital and experience in managing the type of systems necessary for a significant program. The technical assistance proposed would produce the data needed for the preparation of draft legislation and regulations, and would advise the resulting savings insurance and regulatory units on administrative detail. These units would presumably be within the State Bank organization.

CHART 5

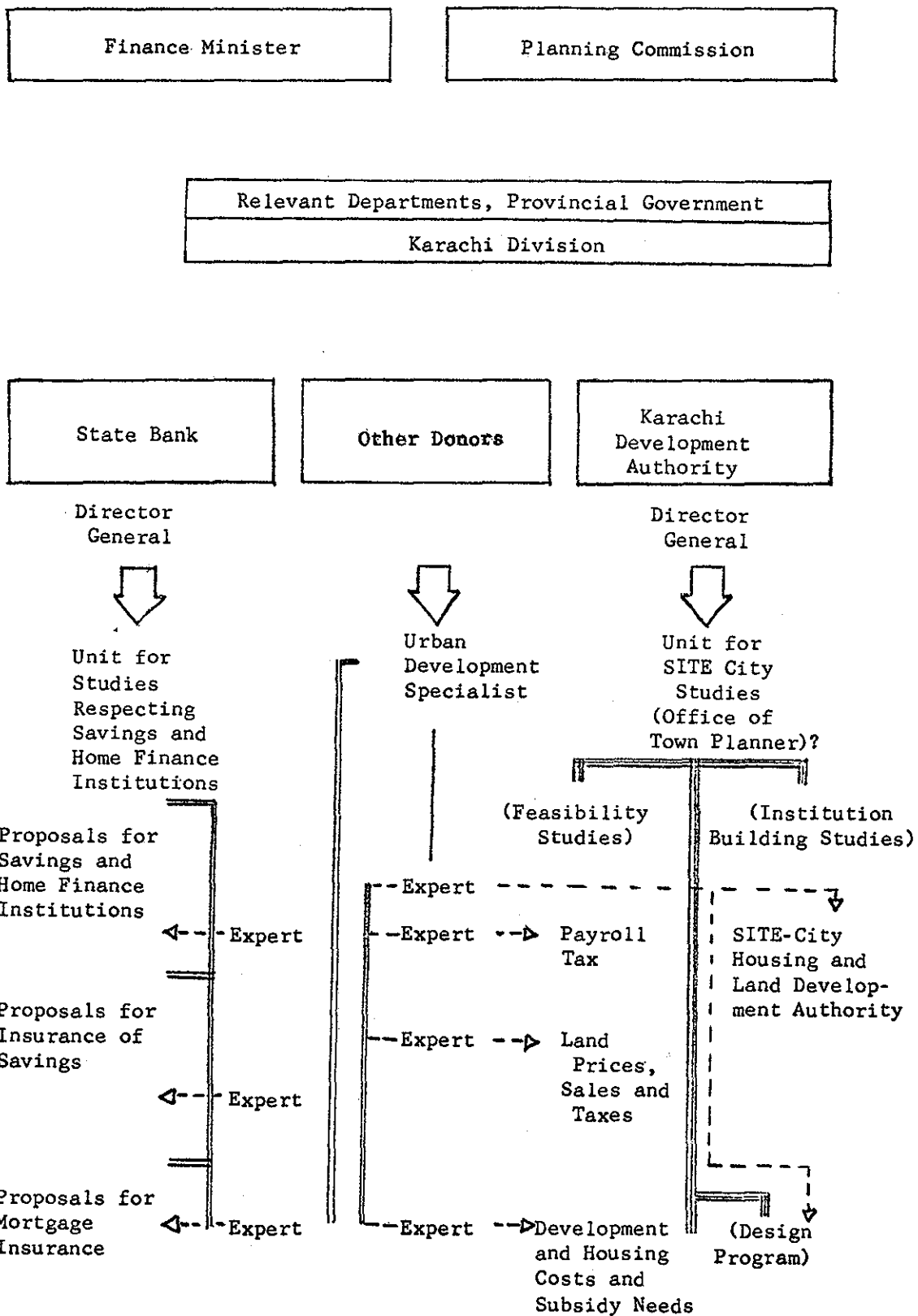


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CHART 6



PART TWO

FIELD TRIP REPORTS

PART TWO
FIELD TRIP REPORTS
TABLE OF CONTENTS

	<u>Page</u>
FOREWORD	1
FINDINGS AND RECOMMENDATIONS	5
STANDARDS FOR A MODEL COMMUNITY AT S.I.T.E.	18
I. BACKGROUND	23
II. PHYSICAL PLANNING AND HOUSING STANDARDS	26
III. BUILDING INDUSTRY, MATERIALS, LABOR, TECHNOLOGY, RESEARCH	31
IV. A NEW SYSTEM OF HOUSING FINANCE	34
V. AN ORGANIZATION TO DEVELOP A NEW COMMUNITY AT S.I.T.E.	71
VI. PROVISION OF MUNICIPAL SERVICES	78
VII. ANNUAL GRANTS TO SUPPLEMENT OCCUPANT'S PAYMENTS	83
EXHIBIT A K.D.A HOUSING PROJECTS	92
EXHIBIT B HOUSING PROJECT DATA SHEET	94
EXHIBIT C STAR TEXTILE MILLS WORKER'S COLONY: CONSTRUCTION COST	102
EXHIBIT D DATA SHEET, S.I.T.E.	103
BIBLIOGRAPHY	105
CALENDAR OF WORKERS' HOUSING TEAM	108
CONTACTS OF WORKERS' HOUSING TEAM	110

FOREWORD

This report was prepared by a USAID team which visited Pakistan from October 4, 1967 to November 12, 1967, at the request of the Government of Pakistan in a response to a suggestion by the Minister of Finance, Mr. N. M. Uquaili. Team members included: Professor George Duggar, Director of Programs in Urban Affairs, University of Pittsburgh; Mr. Eugene M. Mortlock, Board Chairman, First Federal Savings and Loan Association of New York City; and Mr. Dudley Winterhalder, Architect, United States Department of Housing and Urban Development, Washington, D.C.

The report discusses the workers housing problems in Karachi, and programmes that have been devised to cope with them, particularly with respect to the industrial workers at the Sind Industrial Trading Estate.

The Survey began as an initial examination of the feasibility of a model community of industrial workers housing, based on an assessment of prevailing conditions in Karachi. In accordance with the terms of our assignment, we have focussed our survey on workers housing, with special emphasis on its financial and organizational aspects. Our principal objective was a search for means of increasing the output of housing for industrial workers. A large supply of housing for the poor and the lower middle class is a political and social imperative. From the beginning it became apparent that government resources are not now, and will not soon be, adequate to the awesome task ahead. Consequently, we included in our analysis the possibilities for expanding the flow of capital from the non-public sector to help finance the housing of lower middle class families, both as individuals and in cooperative societies. If the government were relieved of some of its financial responsibility for housing the middle class, more of its resources could become available for meeting the needs of lower income groups.

It is obviously impossible in the course of a month to write a definitive account of Pakistan's housing. But we hope that the data and analysis we have put together respecting S.I.T.E. will prove useful to those with an interest in Pakistan's larger housing problem.

It is, of course, inadvisable to discuss the question of industrial workers housing without examining the national economy, population, financial and credit institutions, the urban land supply, building materials, the construction industry, property taxes, rent

control, property laws, and town planning. But we have limited our findings and recommendations to those matters which seemed most strategic in answering questions about housing at the Sind Industrial Trading Estate.

A brief bibliography is attached. We would like to commend the high quality of the housing papers and memoranda prepared by the Planning Commission, the Karachi Development Authority, and others. We have found them invaluable sources.

A brief calendar is attached. The work was done in Pakistan as part of the program of USAID/Lahore, under Director William Kontos. Our study began with briefings at Washington, D.C. by Messrs. Osborne T. Boyd, Thomas Callaway, William R. Gage, Roy Potter and R. B. Pursell. In Karachi, which was our headquarters, services were provided under the direction of Gilbert Lane, assisted by Miss Ruth Malley. Messrs. L. M. Burgess, Garth Jones and Raymond Malley handled our orientation at Lahore. The report was typed by Miss Dolly Bak. We want to thank all these persons, and their immediate staffs, and many others at USAID and US-H.U.D., whose cooperation was essential to our work.

Before focusing attention on Karachi a week was spent in travel in Pakistan, visiting Government Officials and housing projects in Lahore and Islamabad. The experience provided considerable insight and perspective for some of the problems confronting this dynamically developing country. The new capital at Islamabad is an outstanding achievement for a relatively new nation, both from a planning and architectural standpoint. It will set a high standard for the many other rapidly developing cities in Pakistan.

It should be added that the team leader visited Peshawar and Dacca, as well, in the problem of this survey. While the recommendations in this report identify measures believed useful in meeting needs in Karachi, it is evident that with modifications for differences in such factors as building and land costs, and for differences in priorities placed on housing and other needs, the models offered for Karachi could, at the proper time, be used elsewhere in Pakistan. The brief consultations in Peshawar on family attitudes and customs were especially useful since so many of the industrial workers in Karachi come from that region. The consultations at Dacca helped to indicate the differences between the provinces in respect to organization for housing and planning. We wish to acknowledge the assistance of the officials of the East Pakistan Province, the House Building Finance Corporation, the Urban Development Directorate, U.S.A.I.D., the Adamjee Corporation, and Eastern Housing, Ltd., all in Dacca; and the Academy for Rural Development and University of Peshawar at Peshawar.

A list of persons contacted is attached. We shall not soon forget the friendliness and hospitality of the Pakistani people. We wish to acknowledge our appreciation of the efforts of the many officials who helped us to obtain the needed background, and who were too courteous to ask the unspoken question why a group of outsiders should presume that in a few weeks it could acquire sufficient mastery of a difficult problem to contribute to its solution. Most of the data and information used in this report was provided directly, or indirectly, by the Karachi Development Authority whose assistance and cooperation proved invaluable. The professional guidance received from the K.D.A. staff, and many others, was of a very high calibre, but equally important was the manner in which it was given.

Special thanks are due to two organizations, the Karachi Development Authority and the Planning Commission of Pakistan at Rawalpindi. To the heads of these organizations who made possible our welcome there and to Messrs. Khalid Shibli and M. Ahmed Ali, respectively, who arranged our program and interpreted Pakistan to us day after day, we want to express a special note of appreciation.

GEORGE DUGGAR
EUGENE M. MORTLOCK
DUDLEY WINTERHALDER

NOTE:

The findings and recommendations were jointly prepared by the Survey Team and reviewed with appropriate USAID and Pakistan Government officials. Messrs. George Duggar and Dudley Winterhalder prepared their sections before their departure from Pakistan. Mr. Duggar subsequently sent to Pakistan an edited version of these sections. Mr. Eugene M. Mortlock prepared his final report after his return to the United States. His report is included as Section IV, A New System of Housing Finance, and was never reviewed, except in outline form, by the Team and USAID.

FINDINGS AND RECOMMENDATIONS

In response to a request of the Government of Pakistan, the USAID Housing Team studied the feasibility of certain base-line proposals suggested by Mr. X. M. Uquaili, the Minister of Finance, for housing industrial workers within the jurisdiction of the Sind Industrial Trading Estate (S.I.T.E.). In accord with the Minister's suggestion, the Team considered the S.I.T.E. area as a test for considering the feasibility of the base-line ideas for other industrial estates and other urban areas of Pakistan. It also identified some requisites for such a spreading and continuing program.

The Base-Line Proposals

The following were taken as the base-line proposals:

- (a) House as many as possible of S.I.T.E. workers and their families in a good, attractive environment within S.I.T.E., using land set aside for labour colonies or otherwise not dedicated to industrial use.
- (b) Include many types of residential buildings and all community facilities especially shops, and assume that the ground floor of some structures will be appropriate for some of these.
- (c) Utilize capital to be supplied by the industries with plants at S.I.T.E., and assume that some government funds also will be provided.
- (d) Identify necessary changes in finance, banking and public administration which could induce such financial participation on a sound basis.
- (e) Explore ways to encourage home ownership and consequently savings and self-help by the occupants.

S.I.T.E.

The Sind Industrial Trading Estate (S.I.T.E.) is a roughly cigar-shaped jurisdiction of 4,000 acres along the Western Railway about 3 miles northwest of central Karachi, across the Lyari River. Surrounded by "juggies", the largely built-up industrial area, together with the vacant non-industrial land (the latter about 1300 acres) at S.I.T.E. constitutes an island where more than 15,000 persons

perhaps one sixth of West Pakistani industrial employees, work in a compact district especially well provided with utilities in an orderly layout.

The non-industrial area near the northern corner is cut by a rocky ridge generally paralleling the main axis of S.I.T.E., but dipping southeast and then north again to carve out an empty, almost flat high valley floor of about 220 acres called Labor Colony No. 1, leaving to the south about 410 acres in Labor Colony 1, and the rest of S.I.T.E. The rocky hills are almost equal in mapped area to the total of the two labor colony areas.

S.I.T.E. is a special authority and one of 50 local jurisdictions in the Karachi area; many of them, like S.I.T.E., nominally within the boundaries of the Karachi Municipal Corporation. Most of them, like S.I.T.E., were devised as development schemes but continue as partial local governments, utilizing rents and fees instead of taxes, and lease requirements instead of ordinances. A board of seven including four government nominees, including the managing director and three industrial tenants, is responsible to the government for the administration of S.I.T.E.

Criteria

In selecting findings and recommendations to report here we have accepted four criteria:

(a) That we should report on the feasibility of the "base-line" proposals outlined by the Minister of Finance.

(b) That (1) if it would be necessary to go beyond S.I.T.E.'s area to house some of S.I.T.E. workers, or (2) if it would be advantageous to house other workers there, or (3) if advantageous to permit both of these policies, then our findings and recommendations should serve such a more comprehensive program, as well as the base-line proposals.

(c) That relevant important aspects of the housing situation peculiar to Karachi be identified in case that, in accord with the suggestion of the Finance Minister, the findings and recommendations might be used with appropriate modifications in framing policies for additional trading estates and urban areas.

(d) That in a brief report based on a month's study we can only hope to direct attention to what seems to us to be the critical questions. While the findings and recommendations can be stated rather flatly we fully appreciate that they can only channel discussion, not end it. We offer statements with the intent that they will elicit the right questions.

SPECIFIC FINDINGS AND RECOMMENDATIONS

(1) The present number of workers at S.I.T.E. cannot be housed on the non-industrial land there at acceptable standards, certainly not without using much of the hilly, rocky vacant land outside the designated "labour colony" areas. Not all future projected employees at S.I.T.E. can be housed within S.I.T.E., even if permissible densities in the labour colony areas are raised from 250 to 315, as we think appropriate. But S.I.T.E. is the best located and generally most suitable large area for industrial housing in Karachi. Standards for a Model Community at S.I.T.E. follow these findings and recommendations.

(2) More than half of the employees cannot afford new housing of even the minimum acceptable standard without grants-in-aid from the industrialists or from other sources. A large portion of the population now lives in housing which meets no standards. About 72% of the low-income class are too poor to afford standard housing, having income of Rs. 300 or less. We were supplied with an estimate of industrial workers' incomes as follows:

Unskilled	Rs. 90 - 140 per month
Semi-skilled	Rs. 120 - 160 per month
Skilled	Rs. 175 - 300 per month

It is no wonder that only 23% of urban families are reported to be living independently (1960). Doubled up households and an average of 3 persons per room are typical, and "juggie" dwellings exist by the thousands, especially adjoining S.I.T.E. and along the nearby rivers.

Even those workers who might afford acceptable new housing cannot obtain it with the institutions of the housing market, housing finance, and housing policy as they are at present. Development and urbanization in Pakistan is now pressing against (and held back by) the institutions of the urban land and housing sector.

(3) While industrialists at isolated locations in West Pakistan have provided working housing, and industrialists at the somewhat isolated Landhi Industrial Estate now appear to be beginning to undertake such housing, only two at S.I.T.E. have done so, despite allotment for housing of 112 acres to 59 industries there. The mobility of labour among competing work opportunities at the center of a great metropolis requires a more flexible approach to housing, different from that used in isolated locations. It is especially

important in a developing country that eviction not be threatened each time a worker changes his place of employment. Furthermore, one of the many objections advanced by Karachi industrialists to provision by them of housing for workers reflects a basic economic fact: that the productivity of a skilled and specialized housing organization will be much greater than as a minor, reluctant, and small-scale activity undertaken separately by many industrial organizations each specialized in other lines. Also, industry management of housing is questioned as sharply by labour for social reasons as it is by industry on economic arguments.

(4) The difficulty of providing housing in S.I.T.E. or in other industrial estates or elsewhere in Karachi reflects among other problems the weakness of credit facilities for housing. To build a city at S.I.T.E. or to accomplish any main housing objectives, new and strengthened financial institutions are needed. Most evident is the need for an "association for savings and home finance." Attracting savings from industrial corporations, life insurance companies, home seekers, government employees and other individuals, with special encouragement for regular saving, such an association would lend primarily to families of industrial workers to firms, and to cooperative housing societies for construction of houses.

In the early stages the Government of Pakistan could encourage this effort to mobilize private savings by itself lending to the association, matching the savings acquired from the public, such loans to be repaid when the growth in savings reaches a satisfactory level. Also, a special issue of debentures is recommended to raise capital and to give the enterprise momentum in acquiring further capital.

Savings accounts in the association up to an authorized limit (say 10,000 to 20,000 rupees) would, as a permanent policy, be insured by an agency of the Government of Pakistan, the agency to be furnished capital by either the government or the State Bank, the savings and home finance association to pay annually to this agency a premium of 1/8 of 1% of its total insured savings. Savings would earn interest at variable rates determined by competitive conditions.

(5) An effective authority for organizing the building and managing of industrial housing at S.I.T.E. will be needed. We understand that there may be five possible alternatives.

- A. A special housing corporation to build and manage the S.I.T.E. housing area only.
- B. A special housing corporation to build and manage housing within the jurisdiction of the Karachi Municipal Corporation.

- C. Further increasing the responsibilities of K.D.A. in the housing field, by assigning it the job.
- D. A provincial government agency to build and manage a number of industrial estates, including one at S.I.T.E.
- E. Continuing to hope that industrialists individually and working through S.I.T.E., will accomplish the task.

The last seems to us the least desirable. But, the choice of organizational form will depend upon other considerations besides housing, and is discussed under "coordination" below. To operate effectively, whatever its form, it should be an agency of the Government of Pakistan, and have as its Managing Director an outstanding career civil servant experienced in urban physical development. The authority should have the power to incur debt, to plan and develop the city, charge rents and fees, transfer leases, manage property, contract for services and make arrangements for the ultimate transfer of appropriate functions to the Karachi Municipal Corporation, and to Union Committees, and to negotiate with them. It should be successor to S.I.T.E. and the industrialists in possession of non-industrial leases at S.I.T.E., should be regulated as to town planning by K.D.A., and coordinated with the association for savings and home finance outlined above. It should be able to cope, first and foremost, with the challenge presented at S.I.T.E. and to coordinate its work with related agencies.

(6) The location of the residential land at S.I.T.E. is excellent. Probably the most important factor in the selection and planning of a site is proximity to transportation and employment. The standard of living of families whether or not provided with adequate shelter is considerably reduced in Karachi because of the expenditures families must make for transportation, to traverse the city's vast distances. Putting a major supply of adequate housing in a well-planned community adjacent to a major employment center will minimize these costs, and costs to government in providing for traffic.

Probably the next most important locational factor is accessibility to shopping. People shop daily for food, usually from several small shops. Such shopping provides a semblance of recreation and an opportunity to catch up on the latest news. In the plan for S.I.T.E. there should be a minimum of half a dozen shops within a short distance of every hundred families. Larger shopping areas should be provided as part of each neighbourhood community center.

It goes without saying that the residential neighbourhoods at S.I.T.E. should be easily accessible to schools, places of worship, clinics, community centers and parks. Accessibility is much more

important than the extensiveness, or even the quality of necessary community facilities. Small plazas surrounded by shops, schools, mosques, etc. are much more conducive to the creation of interesting, viable communities than grandiose open spaces with little sense of human scale or attention to the real needs of people. Most people like to be near the "local action", and skillful planning can be used as a subtle instrument for its promotion. A small open space created by the careful location of arcaded buildings and a few trees can become a cool and restful oasis in the warm climate of Karachi. It can also be the easily identifiable focal point of the neighbourhood or community.

A grid system of street layout in the residential area of S.I.T.E. would almost completely ignore existing topography, prevailing breezes and vistas. Even the smallest natural feature and some rock outcroppings at S.I.T.E. are dramatic - each slope of the land, or drainageway can be turned into an interesting unique asset while at the same time avoiding costs of excavation, new nullahs, culverts and bridges. Avoidance of a grid pattern would also allow for a more interesting and varied grouping of buildings in cluster arrangements. More intensive use of land at chosen locations reduces costs of site improvement and transportation and permits dedication of open space for public access.

Endless rigid rows of small shelters can become extremely depressing to the observer and must be even more so for the lower income families forced to live in them. A diversity of types of units and a larger mix of income groups should be the objective of the planners setting out to create a dynamic, viable community at S.I.T.E. There is a tendency in Pakistan, inherited from the colonial period, to segregate people by income, religious sect, profession or trade. Physical planning should strive to create neighbourhoods and communities on more basically democratic social principles.

(7) A minimum two-room house with a verandah and/or small kitchen, plus bath and water closet is proposed as a standard. If standards for new low-cost housing are to have any meaning it is recommended that the one-room standard followed in the evacuation period in the Displaced Persons Colonies, Korangi, and North Karachi not be followed at S.I.T.E. A two-room unit allows at least a semblance of privacy and some separation of adults and children becomes possible. If two families share a house, two rooms would seem to be an absolute minimum.

For those families with income of Rs. 200-300 per month three-room units should be provided at a slightly higher price or rent. If two families occupy a three-room unit the increased payment should not be too great a hardship.

All one-story units should have a fairly generous verandah which is less expensive to construct than a fully enclosed room but in effect can be used as a room during most of the year. For use in cooking on the verandah a small enclosed space should be provided for food storage and equipment. It should be mandatory that all units be provided with a water tap and sewer connection. (It seems incredible, but probably understandable considering the availability of funds, that although sewers have been installed in Korangi and North Karachi thousands of dwelling units there have never been connected).

To increase population densities in residential areas it is suggested that only a minimum number of one-story units be included in any future housing scheme. For many reasons - privacy, convenience, a piece of ground to plant a tree, tradition - most families seem to prefer one-story homes. But, in fact, the one-story home in large cities is becoming a luxury due to the increased demand for land. Careful consideration must be given to a greater variety of building types, including two-story row houses and five-story walk-ups as well as low-cost one-story houses. Houses properly located, convenient to transportation and shopping, will attract families and adapt their habits for metropolitan living, one of the prices one has to pay for industrial growth and the other advantages of urban living.

(8) Within the Authority made responsible for residential development at S.I.T.E., a department should be established to provide administrative and technical assistance for self-help or mutual-help housing projects. It should act as a clearing house for information based on the experience of other countries and particularly the valuable first-hand experience from those involved at S.I.T.E. and elsewhere in Pakistan in this exciting home-building enterprise. Site and dwelling unit plans should be made available, together with quantity surveys, construction advice, aid in procurement of building materials, and book-keeping and clerical assistance. Graphically illustrated construction and maintenance manuals, financing techniques and brochures outlining organizational procedures and responsibilities of participants during and after construction should be available to interested persons or groups, free of charge. All this is necessary to self-help housing, with consequent channeling of available manpower, individual pride of accomplishment, incentive for those willing to improve their environment, development of skills in house building and reduction in the amount of cash reserve usually required to obtain home ownership.

(9) Additional financial resources should be channeled from the Karachi area into grants-in-aid of housing for families of low income. They will be required for annual subsidies for housing families of low rent:

The amount paid toward a family's housing would increase on a sliding scale inversely with income. The housing authority would receive and manage all grant funds. Grants would be available for rent or purchase. For its tenants the housing authority would simply supplement rent, (the latter based on a determined portion of income) to cover its total costs of operating rental housing. Grants should be available for home purchases as well. To the home purchaser of low income the housing authority would commit to the financial institution future periodic grants-in-aid, enabling the institution to loan to a family, on the basis both of the borrower's ability to pay and credit and of the promised grant-in-aid.

To adjust for changes in family income, the housing authority should be free to vary the size of the grant-in-aid on an agreed plan. The home financing association would alter the length of the term of repayment of the loan accordingly, on an agreed basis.

(10) We have identified three sources of such pre-committed periodic grants:

(a) Periodic grants by industrial firms for their employees, at 2.5 to 5% of payroll. (On the model of social security training).

(b) Periodic grants of at least one half of net revenue from K.D.A.'s land sales.

(c) Periodic grants, on a matching ratio to be determined, of funds of the Government of Pakistan.

The grants payable by firms investing directly in housing would be reduced pro rata by the annual value of housing maintained by them. Both types of housing grants should be deductible expenses from income subject to tax.

Of the three sources of funds the proposed grant of at least half of K.D.A.'s net revenue from land development operations might be at once the largest potentially, and the most complex conceptually, and is outlined in the body of the report. But the principle is simple: the value of land in Karachi is far more than the cost of serving it with utilities, and grows as the population and its buying power grows. Recent K.D.A. policies to recapture the difference between an auction price and the actual "ballot" price or prices paid by "cooperative housing societies" would be continuously strengthened. In the past an implicit capital subsidy has been granted to the purchaser (subject to a fee if transferred or if unutilized). A reallocation occurs, however, favoring the smaller plots. This is

accomplished by K.D.A.'s land pricing policy. We propose to substitute for this general policy of auction sales of K.D.A. residential plots (Modified of course by the commitment to low income families of future annual grants in the term of debt service payments in amounts varying inversely with income). Early study is proposed of the financial fruitfulness of this promising and appropriate source of financing of subsidies.

Incidentally, we counsel against any blanket restriction on the construction of luxury housing. Although such proposals are well intentioned and designed to release resources for low and middle-income housing, the net gain is likely to be more symbolic than real. The volume of luxury construction is not large and much of it would have to be built in any event to serve the staff of foreign embassies, missions, corporations, and government officials. But a market price approach to land disposition, together with a powerful subsidy for low income housing should have the effect of subjecting the luxury market to the right kind of limitation, discouraging purchase of huge plots for speculation or for single family occupancy.

(11) To serve up to 200,000 people municipal services at S.I.T.E., will have to be reviewed, with an eye to a sharp increase in extent quality, and cost. Although within the boundaries of the Karachi Municipal Corporation, the S.I.T.E. area does not now receive more than nominal services from the Corporation, and S.I.T.E. supplies services of kinds needed in an industrial area, assessing charges to leasehold owners. The tax on rental value at S.I.T.E. is said, therefore, to consist solely of a few charges plus the 10% Provincial tax collection. Some of the other permissible 23%, presumably to be collected by the Province, and divided among S.I.T.E., K.M.C., and the housing authority, will be required as a normal basic revenue supporting local authority. But arrangements would have to be made to divide the revenue raised from the whole of S.I.T.E. between that required for the support of services in the industrial area, (Presumably to continue to be administered by S.I.T.E.) and that made available to the housing authority for services in its area.

Because in S.I.T.E., as in other special development areas, the usual procedures for advice from the people are dispensed with, additional arrangements will be necessary if the Basic Democracies principle is to be extended to the future residents at S.I.T.E. If the operations of the housing authority are made part of a provincial operation, there is the precedent of the cantonments for creating special bodies for representation. If, on the other hand, the S.I.T.E. housing authority is to be a local body, presumably Basic Democracies could be organized within the non-industrial portion.

(12) In K.D.A., Karachi has a unique organization. It is geographically comprehensive and it unites responsibilities for most of the expensive elements of land development and of services to land (water, sewers, streets). With its huge size and scope K.D.A. has had to develop ways of working with decentralized entities. The "Housing Cooperative Societies" offers examples. They take over as "retailers" from K.D.A. (as the land producer) at a late stage in the land development process, and continue into management. The housing authority at S.I.T.E. will be a "wholesaler" and, for rental housing, a retailer as well. Even if independent from K.D.A. a housing authority attempting to build and manage housing at many locations will be dependent upon the effectiveness of K.D.A. as the urban land producer. Of course, this does mean that K.D.A. should be the housing authority. Indeed, K.D.A. responsibility for housing, particularly for housing at only one or a few locations, would place K.D.A. in competition with its customers for utility services to land. The apparent weakness of many of the "Cooperative Housing Societies" and the problems they have caused K.D.A. may have resulted in part from the lack of an intermediary wholesaler; the existence of a housing authority as wholesaler of residential land for housing of industrial workers should clarify K.D.A.'s role and also that of the firms and cooperatives which may manage buildings in the new city at S.I.T.E.

While the issue goes beyond our basic assignment, it is clear that if a housing corporation is given identity distinct from K.D.A., it will require coordination with K.D.A.'s functions which include land development, provision of water and sewerage, and town planning control. Both within the Karachi urban area and at the provincial if not the national level plans for coordination need to be worked out. An office centrally responsible for housing policy within an appropriate ministry at the provincial level is essential. Firm decision based on centralized authority there is assumed by us as basic for any attempt at Karachi to build another major city such as proposed at S.I.T.E.

(13) The proposed comprehensive plan for the greater Karachi area will necessarily take several years to complete, and it seems imperative that preparation should commence immediately. Otherwise benefits which normally accrue from dynamic industrial growth will be wasted in soaring costs of maintaining basic physical and social services to a burgeoning, ill-housed population. Even before completion of the revised master plan interim studies would facilitate the proper location for additional low-cost housing.

Karachi has spread horizontally and has essentially adhered to a master plan which focused new development on relatively flat land, leaving the hills and more rugged terrain as greenbelts.

This planning approach should be reappraised, and serious thought given to developing at least some of the higher elevations within the city. It is admittedly more expensive but perhaps not so much as horizontally extending the city even further. Proper development of the more difficult geographical areas could provide focal points of interest for the city.

Much of the land in the central area of Karachi has been misused or underdeveloped with resulting low population densities. This has forced new housing further and further out creating in its wake a serious transportation crisis. The artificial shortage of land created by low-density land use has caused horizontal expansion of the city which in turn requires more and more traffic, transportation expenditure, and land for streets. To limit the vast amounts of money required for super highways and efficient public transportation system the construction of medium and high-rise apartment buildings in the central city and near industrial areas offer great opportunities.

Contributing to the present low densities near the center are (a) restrictions in old leases, (b) fractional ownerships and small land parcels, and (c) tax exemption of unrented land and of capital gains. A comprehensive policy review is needed of this situation, looking to an orderly but rapid increase in average density.

A word on "locating" and "phasing" housing. Essential to housing development is the right location, and a plan that allocates the structures to the right land. Essential, also, is a "phasing" or sequencing plan. In this day of advanced techniques in physical-spatial planning, and of "P.E.R.T." and other sequencing systems, it would be wasteful not to use these methods. It is imperative, also, to build in a "pragmatic check." Regardless of the quality of the overall planning and original scheduling, a limited portion of the large city proposed here should be built first. That portion should be tried, lived in and studied before proceeding to build the whole vast complex.

(14) Planners will have to exercise a degree of flexibility in setting standards for facilities in housing a population that is not urban-minded. The standards may have to rise flexibly as the characteristics of the population change.

Architecture and planning should be designed to accommodate the past, not in terms of obsolete architectural forms but rather in serving Pakistan's social life and capturing the atmosphere which is Pakistan's cultural heritage. Housing and related community facilities should invite, serve and encourage people who are experiencing transition from rural customs to a mode of life suitable for the new urban environment.

Too often, programs are planned for rather than with the participants. As a result, housing and community facilities are underused or misused, discouraging those who have provided them. But it is difficult for anyone to appreciate or participate in something for which he himself has not had a hand in planning, which may not meet his real need or interest, but which is imposed on him as being good for him. Therefore, it is well to work closely with the residents and community organizations to ensure that whatever facilities are provided are wanted and needed. There is a better likelihood too that the residential area will be more valued because of this partnership in planning.

(15) The present venter of extremely able, trained professionals in housing and planning and in administration of programs in these fields is clearly too thin in Pakistan. Each small additional group of professionals trained to draw on many disciplines, and to make decisions in the light of technical experience elsewhere clearly has enormous impact. Decision and organization appear a prime need if the necessary, fairly long-term commitments are to be made to chosen educational instruments for each profession: structural, mechanical, soils, and sanitary engineering; architecture and urban design; city planning, urban analysis, and urban development administration; urban land and housing economic analysis, housing financial administration, housing management, and urban community development.

(16) Initial efforts to improve design and foster a building industry should be focused on the establishment of a technical and research library related to all aspects of the industry including planning, design, methods and techniques of construction, administration, building materials, soil mechanics, landscaping, engineering sociology, etc. Of special value would be periodicals and scientific publications so that anyone involved in planning and building could take advantage of all the latest international developments in the vastly complicated and ever changing process of building design and construction. Such a library might form the nucleus of an Institute of Environmental Design and Development incorporating the P.C.S.I.R., and could be financed from both public and private sources. The Institute should sponsor and encourage the development of new materials and modern construction methods through its own resources or by grants and subsidies to industry. It should also participate in trade fairs, exhibitions and the planning and construction of actual demonstration projects incorporating the latest achievements in building technology.

Organizing for Low Cost Housing

This aspect is discussed at length in Part One of this report. Attention is particularly called to four charts that have been prepared as to what we believe is necessary to make feasible housing for low-income industrial workers at S.I.T.E. and for similar workers elsewhere.

STANDARDS FOR A MODEL COMMUNITY AT S.I.T.E.

The following illustration is based on the area within the Sind Industrial Trading Estate located approximately three miles from the center of Karachi. It is the oldest, most dynamic and successful industrial area in West Pakistan. The administration of the Estate is managed by a Board of Directors, of whom four are nominated by the Government and three are selected from among the tenants of the Estate.

A paragraph from "Industrial Estates in West Pakistan", a publication of the National Institute of Public Administration, Lahore, describes its establishment and operation:

The oldest Industrial Estate in West Pakistan is the S.I.T.E. i.e., the Sind Industrial Trading Estate in Karachi. It has been functioning for the last 16 years. This pilot enterprise was launched by the former Sind Government in November, 1947, when a company was floated called, 'The Sind Industrial Trading Estate, Ltd., Karachi'. The object was to establish a planned industrial area where prospective industrialists could obtain all facilities such as land, roads, railways, water supply, electricity, telephones, godowns, sanitation, drainage, labor colonies, and other public amenities. Land measuring 4,000 acres was provided by Government free of cost and a loan of Rs. 46 lakhs, bearing a simple interest of 4% per annum was sanctioned for the financing of the project. Although the primary aim of the Estate was rapid industrialization, the objects of the Estate were extended to include the problem of relieving unemployment, particularly resulting from the influx of refugees.

It seems entirely appropriate, therefore, that a model community for industrial workers should be developed at S.I.T.E. A total of 630 acres has been reserved for housing within the Estate divided into two housing colonies - Housing Colony No. 1 with 220 acres and Housing Colony No. 2 consisting of 410 acres. The only workers housing so far completed includes 210 two room family quarters developed and owned by the Star Textile Mills Limited (See Exhibit C). Community facilities provided within the Estate are: 200 bed hospital, stadium, auditorium, club, six banks, 13 petrol pumps, two shopping centers, one model school, seven mosques, one police station, two post offices, one telephone exchange, one employment exchange and one polytechnic institute (See Exhibit D).

Although the proposed density of housing is 250 persons/acre (22 bachelors accommodations plus 46 family units per acre) it is suggested this be increased to a minimum density of 315 persons/acre or approximately 15 bachelors accommodations and 60 family units.

This would allow the construction of a variety of accommodations in dormitories, one and two story single family dwelling units and five story flats permitting a total population of approximately 200,000 (37,800 family units and roughly 9,500 dormitory bachelor accommodations). The objective of the model community would not only be the provision of sorely needed housing but a practical illustration of contemporary planning and building design incorporating mass production techniques, self-help methods, efficient administration and new methods of financing.

As recommended under Housing Standards the basic unit for the lowest income families should consist of 2 rooms (approximately 10'x12' each), a verandah or balcony, space for food storage, a bath and water closet. To reduce monthly utility costs each unit should be provided with a gas outlet (the most inexpensive type of fuel) and at least one electric outlet. A variety of more spacious accommodations should be provided ranging from the basic two room unit up to a 4 room modern flat with appropriate increases in monthly payments in order to achieve not only a variety of building types but more important a mixture of income groups. Families with higher incomes serve as an example and act as an incentive for those at the bottom to move up. Community leadership will also be derived at least initially from the higher income groups. Without a socio-economic mix communities can soon become ghettos of despair regardless or in spite of the quality of the dwelling unit.

As a general guide it is suggested that approximately 70% of the total family units should consist of 2 and 2 1/2 rooms, 20% 3 rooms and 5-10% 4 rooms. It is highly recommended that all or most accommodations be made available on a lease-purchase, hire-purchase, or condominium arrangement to permit the possibility of eventual home ownership by all residents of the community desiring to participate. One of the difficulties in relocating squatters has been their reluctance to give up any real (or unreal) rights to possible ownership of land. If they understand, through community action type programs, that they can become property owners, it should be easier to move them voluntarily into good housing and attractive neighbourhoods.

Since most families seem to desire one story homes and only about 25% of the land (approximately 6,000 - 20'x50' plots) should be available for this type of "luxury" housing it is suggested individual plots only be allotted for those families willing to participate in self-help schemes. A sweat equity on the part of the family would be required in order to obtain a one story dwelling unit. Any income level could participate in the program and would be allowed to select either a 3 or 4 room plan - depending on their ability to meet monthly payments for materials. As one story housing is best suited for self-help schemes of construction and although a method might be devised for multi-story flats it should not be attempted in the initial phases of development.

Self-help or mutual-help projects should be developed in increments of approximately 10 dwelling units on plots subsidized by the Estate, including site improvements such as water, sanitary facilities, gas and electricity. The project would be supervised by a technical expert and would require that at least one member of the family (or a friend) spend at least 40 hours a week in helping to build the home. There should be constant surveillance by a general superintendent as well as a construction supervisor who would assist and advise participants in actual construction. The superintendent would have the overall responsibility for the procurement and timely delivery of materials for the ten houses, which would be financed by the proposed financing institution in an amount that would cover the entire cost of materials plus a reasonable fee for administration and technical assistance. The loaning institution should make funds available as the project proceeds and pay for materials in place based upon the superintendents' certification.

Bachelors should be accommodated in three to five story dormitory buildings. The bachelor units, with possibly three to four persons to a room, should be designed for conversion at a later date to small two room flats when there is no longer a pressing need for this special type housing. The dormitory buildings should be insulated but not isolated from family housing and should be an integral part of the community. Rents should be on a daily or weekly basis and sufficient to cover management, maintenance and amortization of the construction loan.

A firm or team of qualified consultants consisting of a planner, architect, sociologist, attorney, contractor and financier should outline a specific program for the development of the model community in cooperation with the K.D.A., representatives of S.I.T.E. and the National Planning Commission. It is suggested that when a program has received the necessary approvals a limited International or Asian Design Competition should be held to select a firm or firms to draw up the final plans.

To obtain the lowest possible construction cost and to foster mass production methods and techniques the entire project, excluding plots reserved for self-help programs, should be submitted to a limited number of qualified contractors for competitive bidding. Construction drawings should only outline building locations, space requirements, building heights, dwelling unit plans and performance standards. Materials and construction methods should be sufficiently flexible to allow contractors the widest possible margin, within carefully prescribed limitations, for the introduction of mass produced materials and the use of the most modern type of construction equipment. The construction contract could have special provisions for maximum employment of local labour and agreement to purchase construction equipment or factories required for the production of building materials at special prices upon completion of the project. This type of project

development could be very advantageous not only from a cost standpoint but could also give considerable impetus to the entire building industry in Karachi. To be attractive, however, to large contractors and developers with the necessary financial backing and construction know-how the project must involve a large number of dwelling units. If the size of the project is of a scope as outlined above there should be no trouble in obtaining an adequate number of interested bidders. To reduce the initial outlay of funds construction should be phased over a period of five years, or approximately 6,000 units per year, with the option of renewing the contract upon the completion of each increment of housing.

Illustrative Breakdown of Dwelling Unit Types and Preliminary Estimates
of Costs (1967 price level)

Total number of family units (average household 5 persons) 37,800
Bachelors in dormitory accommodations 9,500

By Construction Contract: 2-5 Story Row Houses and Flats

<u>%</u>	<u>Number</u>	<u>Type</u>	<u>Est. Cost per Dw. Unit</u>	<u>Total Est. Cost</u>
35	13,225	2 rm. (no ver.)	Rs. 3,000	Rs. 39,675,000
35	13,225	2½ rm	3,500	46,287,500
6	2,560	3 rm	5,000	12,800,000
8	2,790	4 rm	7,500	20,925,000
Total	84	31,800		Rs. 119,687,500

Self-Help: 1 Story Houses (Materials and Utilities)

13	5,000	3 rm	Rs. 3,500	Rs. 17,500,000
3	1,000	4 rm	5,000	5,000,000
Total	16	6,000		Rs. 22,500,000

By Contract: Bachelor, 4-5 Story (4 Pers. per room)

Total	2,375 rooms @ Rs. 2,500 per room	=	Rs. 5,937,500
Total	Estimate Cost of Project		Rs. 148,125,000

NOTES:

1. Estimated total cost of dwelling unit includes site improvements (roads and utilities at cost) and construction of dwelling unit. The estimate does not include site acquisition, overhead, administration, planning fees, increase in construction costs or overhead.
2. Costs can vary considerably depending on standard adopted - i.e., size of plot, size of rooms, cost of land, size of verandah or balcony, quality and type of materials, number of electrical outlets, interior and exterior finishes, type of openings - windows-doors, type of floors, number of storeys, construction methods (mass production) size of construction contract.

I. BACKGROUND

Karachi

Karachi is located at the mouth of the Indus River at the southern end of an alluvial plain extending roughly 1000 miles in length from north to south and more than 300 miles broad. The Indus Valley is watered jointly by the Indus and the five rivers of the Punjab. Karachi is the major port of West Pakistan, with an extensive industrial concentration. Approximately 60% of all industry in West Pakistan is reported to be located in Karachi. The city is now the largest industrial center of Pakistan, the number of industrial establishments having increased more than 100 times since independence in 1947. The industrial establishments in Karachi employ about 25% of the total industrial labor of the country. Karachi enjoys a pleasant year round climate with invigorating sea breezes except for April, May, June and October.

In West Pakistan the deficiency of moisture and lack of rainfall has been amply compensated by nature in the form of perennial rivers coming from the Himalayas. A bulk water supply system brings water to Karachi from the Indus river at a distance of about 60 miles. The present capacity is 70 million gallons per day. The water is pumped 200 feet high at the Dhabeji Pumping Station and flows to a purification plant through a gravity conduit. Although there are indications of a water shortage in the immediate future, it is planned to increase the water capacity to 280 million gallons per day. The sewerage and sewage disposal scheme treats some 40 million gallons of sewage per day. The two treatment plants are located at the Sind Industrial Trading Estate and Mahmoodabad Colony. Methane gas is to be extracted from the sewage and utilized for fuel engines and power production. Sludge will be dried on sand beds for use as fertilizer and plant affluent will be used for irrigation purposes.

Population Characteristics - Religious & Social Customs

Since 1947 the population has grown from 300,000 to almost 3,000,000 in 1967. The city concentrates more than 25% of all urban population of West Pakistan and about half of the total population living in towns greater than one half million inhabitants. Present forecasts indicate the population may reach as high as 6 million people by 1990.

The population of Karachi is extremely diverse, consisting of thousands of evacuees from all parts of India and a continual flow

of migrants (30,500 per year) from rural areas. Roughly 72% of the urban families belong to the lower income group, 23% can be classified as middle income and 5% are in the upper income bracket. Approximately 40% of the population are children under 15 years of age, 40% of the population is married, 15% are single unmarried adults and 5% are widowed.

A large proportion of the married male population have migrated to Karachi without their families in order to seek gainful employment. There is insufficient data to indicate the length of the time they remain in Karachi as single person households. Most of the rural migrants set up housekeeping in temporary settlements, consisting of mud and straw huts, scattered in small and large clusters throughout the city and inhabited by other migrants usually from the same rural village. A deep tie seems to exist with the ancestral village and many have hopes of returning someday. Nevertheless, some become "urbanized".

Privacy is valued highly by nearly all Pakistani families. Except for the juggles even very modest homes are surrounded by a compound wall. Careful attention must be given to buildings over one story in height so that a window does not overlook another persons yard or look directly into another apartment. Although purdah is slowly dying out it is still practiced to a large extent. Women spend most of their time in the home or compound.

The one unifying factor in the heterogenous population is, of course, religion. But even this bond breaks down to some extent into a variety of sub-units based on various Moslem sects. There are several minority groups, principally Christian, Hindu and Parsi (Zoronstrian).

Karachi's Housing Problem

Karachi's housing shortage is evident. An obvious source of Pakistan's continuing shortage is poverty. A substantial part of Karachi urban families are simply too poor to obtain shelter of sufficient space and quality or for that matter any shelter at all. A substantial percentage of urban population suffers from deficient housing. They live either on the pavements or in dwellings so over-crowded, so lacking in the barest essentials of sanitation, and so inadequate in construction as to drain the health and productivity of their inhabitants. Each year sees a large new addition to the housing - deficient population, as rural areas disgorge their landless young men and families who come to the city for a second change. They may find it or they may not, but in either case they make a claim for living space against a housing inventory that is not growing fast enough to accommodate them. This lack of living space - destined to grow even larger - constitutes Karachi's urban housing need.

The locus of the shortage lies not only among the poor but also in a large and growing lower middle class consisting of government servants, clerical employees, small shop-keepers and higher paid industrial workers. This class, energetic and productive, continuously seeks to improve its life, to translate rising income into rising living standards - more and better education for its children more and better clothing and, above all, more and better housing. Their claim for housing arise from dissatisfaction with inadequacy of present housing. Theirs is a housing want.

Failure to make reasonable provisions for these housing needs and wants robs the economic system of one of the principal resources for economic growth and breeds restlessness, discontent and political instability. It also results in an inflation of house prices and rents and in under-the-table payments as unsatisfied demand is turned with full force against the existing supply of good housing.

Subsidies Versus Loans

The needs of the poor must be dealt with mainly through enlarged public subsidies. The needs of the lower income families can be dealt with by a combination of subsidy and private enterprise. It has not been recognized sufficiently that the lower and middle-income classes have the capacity to self-finance a larger share of their housing requirements - if appropriate financial and institutional facilities are available through which the willingness to scrimp and save for a better home can be converted into the loan funds required for producing new houses.

II. PHYSICAL PLANNING AND HOUSING STANDARDS

Because of rapid physical expansion, the city of Karachi today extends over about 40 miles in the West-East direction, and the developed or under-developed area covers approximately 400 square miles. Two kinds of problems confront the planners - (1) the necessary reconstruction and amelioration of the existing city (2) future physical expansion. At present the population density is very low and few buildings exceed one or two stories. The time has arrived when serious thought must be given to increased utilization of land and increased densities allowing a greater amount of medium and high-rise construction. If the city continues to grow only horizontally the street and utility network will have to expand vastly, and will become more and more difficult to finance.

The transportation problem has already become alarming and will only grow worse if the present horizontal pattern of growth is allowed to continue. No coherent transportation system now exists in Karachi, which results in waste of energy, time, diminishing efficiency, cost and loss of human life. A circular railway, when completed, may help to alleviate the transportation problem but only if it is integrated with an organized radial bus system. At present there is a preponderance of bus companies most of which operate only one unscheduled bus at unspecified stops. The number of privately owned automobiles is increasing, adding to the already existing confusion of pedestrians, bicycles, taxis, donkeys, camels, buses, cabs and trucks.

Preparation of a master plan for Karachi was begun in 1947 by the firm of Merz-Rendel-Vatten-Pakistan, and completed in 1951. It has been the guiding factor for the development of the city but is now outdated. It was designed for a total population of only 3 million persons, and higher population forecasts and many other unforeseen changes have now taken place. The Government has decided to take the question of the provision of the master plan and has requested assistance from the United Nations in its preparation. Preparation of a new master plan, however, will be under the direction of the K.D.A. Preliminary studies have been under way for some years but work cannot start in earnest until funds are forthcoming from the United Nations.

Housing Standards

A large portion of the population now lives in housing which fails to meet any standards. About 72% of the low-income class are too poor to afford standard housing, having incomes of Rs. 300 or less. An estimate of industrial workers incomes is as follows:

Unskilled	Rs. 90 - 140 per mo.
Semi-skilled	Rs. 120 - 160 per mo.
Skilled	Rs. 175 - 300 per mo.

In the publication "Housing: Short Range Tactics and Long Range Strategy" by the Government of Pakistan Planning Commission, Physical Planning and Housing Section, printed January, 1965, the situation is analyzed as follows:

From the analysis of the pattern of living, in urban area, it is quite clear that as yet very few families have their 'in-laws', relatives and non-relatives living with them. This is only partly due to the housing shortage, and to a large extent is due to economic reasons and sociological and cultural patterns of life. As such, it will not only be too ambitious but almost erroneous to consider a separate dwelling unit for each urban family in the near future. We may keep this as long range objective, which may be achieved in harmonious balance with economic growth and subsequent structural changes taking place in our socio-economic and cultural life.

Further:

It is therefore quite clear, that as yet it is not possible to use the concept of the "urban family" effectively for purposes of physical planning and housing. Concept of 'urban household' which is based on common cooking or kitchen facility, is much more of a viable concept in view of the prevalent socio-economic conditions. Accordingly the concept of "urban households" will be used to assess the prevalent and desirable standards, till such time that the concept of 'urban family' begins to be more effective. This is illustrated in the following programme for 1965-1985.

Item	<u>Long Range Urban Household and Family Pattern</u>					
	<u>1959-60</u>	<u>60-65</u>	<u>65-70</u>	<u>70-75</u>	<u>75-80</u>	<u>80-85</u>
Av. size urban Household (persons)	5.6	5.6	5.6	5.4	5.0	4.5
Av. size urban family (persons)	4.6	4.6	4.6	4.4	4.2	4.0
Number urban household to be accommodated in single dw. unit	1.6	1.5	1.5	1.3	1.15	1.0

Existing Housing Supply, New Source and Need

The total population of Karachi is rapidly approaching, and may have already exceeded, the 3 million mark. The population is reported to be increasing at a rate of 6% annually. Housing supply, based on a 1961 survey - the latest available - was estimated to be 360,000 dwelling units. Only about half of the population is even modestly well housed. About 120,000 units are classified as "Juggies" (Mud and straw huts). Another 100,000 units are located in slum areas. The average number of persons per room is 3.7. It is estimated that 3/4 of all dwelling units have no water supply. There are reported to be about 600,000 "shelterless" people, including many refugees from India, and their number is not diminishing. An analysis of available data indicates there is an immediate need for at least 100,000 new dwelling units to serve low-income families.

Government Housing and Land Development

Between 1948 and 1957 the Central Government sponsored, built and undertook management of approximately 40,500 nucleus houses for refugees in displaced persons colonies. In 1958 the management of these colonies was turned over to the K.D.A. Between 1958 and 1965 the Central Government sponsored the Greater Karachi Resettlement Program, under which the K.D.A. constructed, and now manages, 26,000 low income units at Korangi and 18,600 low-income units at North Karachi. Although the Central Government still retains financial control of the low-income units developed up to 1965, it no longer participates directly in the development of housing in Karachi. The K.D.A. now has the primary responsibility for all new low-income housing programs.

In order to encourage the development of multi-story housing by private enterprise two apartment buildings were built by K.D.A. as demonstrations. But, K.D.A.'s major roles are as supplier of utilities and in planning and developing large tracts of Government land. It installs streets and utilities and sells plots at low cost to private developers, housing cooperative societies and individuals. In this respect the K.D.A. is a unique organization and through its efforts has been instrumental in providing shelter for many thousands of low-income families, and indirectly an adequate supply (approximately 3,000 units per year) of very good housing for the middle and high income groups. However, due to the exploding rate of population increase K.D.A. has not had the resources to keep abreast of the ever increasing needs of the low-income groups. (For a list of K.D.A. housing and land development schemes see "Exhibit A" & "B").

Other sources of Government sponsored housing are provided in the seven long-established and independently governed cantonments located in Karachi, and by the Public Works Dept. which constructs and maintains housing in a number of settlements established by the Central Government for its employees.

Non-Government Housing

Private institutions, religious groups, employees associations and developers build housing. For example, The United Bank, The Agha Khan Community and the Parsi Community each provide housing for their employees and members.

Mr. Sardar Amir Azam, a private builder, is currently developing a 1,000 unit high-rise project on eleven acres of land. Most of the flats will be in five story gallery type buildings and will sell for Rs. 11,000 each. A down payment of Rs. 3,000 is required, with a monthly payment of Rs. 68 per month (not including utilities). Each flat consists of a drawing room, one bedroom, dining room, a small kitchen and bath. Each building in the project will form a tenant society for operation and maintenance.

Another active builder is the firm of Hussain-D^oSilva Enterprises, Ltd. An attractive subdivision, Hussain-D^oSilva Town, for middle income families developed by the firm consists of 235 bungalows with 200-400 sq. yd. plots. The larger bungalows with 3 bedrooms, 2 baths, drawing room, dining room and kitchen sell for Rs. 40,000 and a 2 bedroom bungalow sells for Rs. 25,000. Currently, the firm is developing Hussain-D^oSilva Gardens, an estate of hire-purchase flats in several nine story elevator buildings. The two bedroom flats contain approximately 800 sq. ft. each. The cost of a flat, including a proportionate share in the land and the common facilities is Rs. 32,000. Each tenant becomes a member of the Cooperative House Building Society and is required to make an initial down payment of Rs. 12,000, after which the society arranges a loan of Rs. 20,000 repayable in monthly installments of Rs. 200 at the rate of 6½% interest per annum for 12 years. It is difficult to determine the number of servants and their families housed in private homes but this supply should not be overlooked in future housing surveys.

Evacuee Housing

A large supply of existing housing, particularly evacuee property, continues to deteriorate at an alarming rate. Shortly after independence claimants who had previously owned property in India were given title to evacuee housing and land of approximately

the same value. In many cases the evacuee was given title to a flat but no arrangements were made for operation and maintenance of these buildings and the situation has never been resolved.

Self-Help Housing

The K.D.A. is providing approximately 40,000 developed plots (10,000 plots have been sold to date) of a minimum standard at cost for families who wish to build on a self-help basis. Building materials must be supplied by each family and little or no technical assistance is provided. (See Also Exhibit A).

Another self-help project of 1,000 units, to cost Rs. 1000 each, is being planned by "C.A.R.E." with land and assistance provided by K.D.A.

An exciting self-help project is now underway by the Telephone Employees Cooperative House Building Society, Ltd. Organized by Mr. A. Hamid, Director General of the Telephone and Telegraph Dept. and Mr. R. A. Khan, Director of Telegraphs, the project, consisting of ten initial units, has been under construction since October 1, 1967 with final completion anticipated by February, 1968. The 10 plots (120 sq. yds. ea.) with site improvements were obtained at cost (Rs. 4 per yd.) from the K.D.A. and technical assistance is provided at no cost by the Building Research Station at Karachi. Each dwelling unit contains approximately 720 sq. ft. with drawing room, two bedrooms, kitchen and bath. Cost of materials per house is Rs. 3,500 requiring a monthly payment of Rs. 50 to the Society. When payments become six months in arrears the house will revert to the Society. It is estimated that the total value of each house when completed will be worth Rs. 16,000. The project is exceptionally well organized and much of the credit must be given to Mr. Hamid who spent two years planning and researching the self-help method.

III. BUILDING INDUSTRY, MATERIALS, LABOR, TECHNOLOGY, RESEARCH

To a large extent in Karachi buildings, and especially housing, are constructed with unskilled and semi-skilled labor using traditional materials and methods. Most housing is limited to one story with some two and three story in the luxury class. There are some old and new five-story walkup flats and only a limited number of projects exceeding five stories.

There are, as yet, relatively few large building contractors in Karachi capable of constructing large multi-story projects. Modern construction equipment, such as cranes - power tools - and earth moving equipment - is scarce and expensive. There are apparently many small contractors operating on a very limited scale. Building material supply houses for the most part do not exist and each building product must be procured at the source, manufactured on the site or imported.

Skilled craftsmen and technicians are in short supply, although there are polytechnic trade schools with established training facilities for the building trades.

Nearly all new housing is constructed of solid concrete block with very little steel reinforcement. Portland cement is manufactured in Karachi but concrete is nearly always mixed at the job site (1:2:4) by hand or in small mechanical mixers. Ready-mix concrete is not available. Wood is used exclusively for shuttering or framework. Precast concrete beams and roof slabs with some steel reinforcement have been used in some of the larger low-cost housing schemes. Raw concrete floors are provided in most low-cost housing and terrazzo floor tile is used almost exclusively in the better homes. Concrete in place costs Rs. 23/100 sq. ft. (6" thick) or 50 paisas per cubic foot and 25 paisas per cu. ft. for shuttering.

Most steel and metal products are imported. Some reinforcing steel and light steel beams are manufactured in Karachi but raw material must be imported. Wood products are scarce and seldom used except for shuttering, doors, windows and for cabinet work in the more expensive homes. Roofs for the most part are flat and water-proofed with bitumen. Except for luxury type building, electrical and mechanical work is nearly always exposed on the interior, but more often on the exterior walls of buildings.

High quality construction runs about Rs. 30/sq. ft.; medium quality Rs. 20/sq. ft.; and low cost construction Rs. 15/sq. ft.

Efforts have been made by a few industrialists to find new materials and methods to facilitate the development of a building industry. Mr. Mohammad Mohsin Siddiqi is interested in establishing a modern factory to produce sand lime bricks, hollow and solid blocks, floor and bathroom tiles, decorative tiles, heating plates, electric fuse switches, slabs and electrical insulators. Sand lime brick might be as much as 50% cheaper than solid concrete block (Rs. 21 for 100 sand-lime brick vs. Rs. 55 for 100 solid concrete block). With a production rate of 30,000 bricks a day assuming about 30 employees it is estimated the initial capital cost involved could be recovered in four years.

Professional Services

Professionally trained and qualified architects, civil engineers, structural engineers, mechanical engineers, landscape architects, planners, land appraisers, and development administrators are scarce in Karachi. There are probably 100 architects but only a dozen are well qualified.* The architecture and planning professions are not well organized and regulations are not sufficient to prohibit unqualified persons from active practice. Qualified professionals available for government service are similarly limited in number. The lack of professional expertise to assist and organize the housing industry is certainly a deterrent to good planning and to the development of an adequate housing supply.

Building Technology and Research

The Pakistan Council of Scientific and Industrial Research through its Building Research Stations and Central Laboratory is responsible for basic research, engineering and the development of new building materials. This is about the only institution, public or private, in Karachi involved in building research. Most industrialists are hesitant to invest any money in long-range development projects. The P.C.S.I.R. is an agency of the Central Government administered by the National Science Council. The Station in Karachi has a staff of 54, including 25 trained technicians and seven university graduates. It is apparently understaffed, short of funds, has a very inadequate library and is unable to subscribe on a regular basis for bulletins, trade journals, etc. Most of its equipment has been furnished by foreign countries but much of it is not in working order due to import restrictions. Research on concrete is given first priority. Following is a list of reports indicating the scope and type of research:

*There are literally no qualified landscape architects.

1. Lightweight and cellular clay bricks as insulating and structural material.
2. Wood preservation.
3. Fixempero - a gypsum based distemper.
4. Stabilized earthen walls for houses.
5. Utilization of "balcrete" foaming agent.
6. A discussion of several designs for the large scale production of low-cost roofing in small houses.
7. Roof slabs in low-cost houses - plain concrete vault roofs.
8. Flexural strength of plain cement concrete.

IV. A NEW SYSTEM OF HOUSING FINANCE

Note:

This section was prepared by Mr. Eugene M. Mortlock after he returned to the United States. The basic contents were reviewed in Pakistan with USAID and Pakistan Government officials before his departure.

Parts of his report were edited in the Mission to bring it in conformity with the rest of the Survey Report.

INTRODUCTION

The Urban Housing Problem

Pakistan's housing shortage has two main causes. The obvious one is poverty. A substantial part of Karachi urban families are simply too poor to obtain shelter of sufficient space and quality or for that matter any shelter at all. A substantial percentage of urban population suffers from deficient housing. They live either on pavements or in dwellings so over-crowded, so lacking in the barest essentials of sanitation, and so inadequate in construction as to drain the health and productivity of their inhabitants. Each year sees a large new addition to the housing-deficient population, as rural areas disgorge their landless young men and families who come to the city for a second chance. They may find this chance or they may not, but in either case they make a claim for living space against a housing inventory that is not growing fast enough to accommodate them. This lack of living space - destined to grow even larger - constitutes Karachi's urban housing need.

The second cause of the shortage stems from a large and growing lower middle class consisting of government servants, clerical employees, small shop-keepers and higher paid industrial workers. This class, energetic and productive, continuously seeks to improve the content of its life, to translate rising income into rising living standards - more and better education for its children, more and better clothing, and above all, more and better housing.

The search of this class for higher housing standards does not arise from housing "needs", in the same sense of the term as it is used for the very poor. The lower middle class does not live on the streets and most do not live in the worst portion of the housing inventory. Their claim for housing arises from dissatisfaction with the inadequacy of present housing. Theirs is a housing "want".

We stress this hunger of the middle class for more housing because it cannot long be thwarted. The failure to make reasonable provision for these housing wants robs the economic system of one of the principal resources for economic growth and breeds restlessness, discontent and political instability. It also results in an inflation of house prices and rents and in under-the-table payments as unsatisfied demand is turned with full force against the existing supply of good housing. This last consequence is a crucial one for Pakistan's economists to ponder. Many of them are quick to point to the possible inflationary effects of stepping up the rate of home

building, but fail to see that holding back construction in the face of a relentless private demand is at least equally inflationary in the short run and more so in the long run. Unless they are prepared to curtail the demand for housing - and no practical suggestions have been offered on how this might be accomplished - the ultimate curb to inflation in urban property values is a more rapidly rather than a less rapidly increasing housing inventory.

SUBSIDIES vs. LOANS

The shortage of urban housing is thus a compound of the housing needs of the very poor and the housing wants of those willing and able to assume an increased burden of housing costs in order to improve their status. The needs of the poor must be dealt with mainly through the enlarged public subsidies. The needs of the lower income families could be dealt with on a combination of subsidy and private enterprise. What has not been recognized sufficiently is that the lower the middle income classes have the capacity to self-finance a larger share of their housing requirements - if appropriate financial and institutional facilities were available through which the willingness to scrimp and save for a better home can be converted into the loan funds required for producing new homes.

1952

IMPEDIMENTS TO MORE HOUSING

Needless to say, numerous impediments exist to a higher rate of residential construction for both the poor and the not so poor. In addition to formidable limitations of financing there is government control of the use of urban land, limitations of construction materials and skilled labor of managerial talent and entrepreneurial spirit. But perhaps the greatest impediment of all has been the reluctance of Pakistan's planners to accord housing a higher priority in national planning. Unlike the case in developed nations, there is no organized housing lobby, no pressure from builders and mortgage lenders; there are only the voices of a few socially minded planners whose pleas for "balanced development" do not seem to reach very far into the councils of government.

Although it is our belief that urban housing should be assigned a higher place in national planning, this is a decision that the Pakistani government, and in the last analysis, the people alone can make. Consequently, the major emphasis of our survey has been not a consideration of priorities, but a search for answers to two questions: First, is it possible to obtain a larger quantity of housing out of given allocations? And second, can publicly aided housing be distributed in a more equitable way that is in closer accord with need, and with no more subsidy than is absolutely necessary?

RECOMMENDATIONS

The first of our recommendations is that there be improved administrative structure of the present housing programs. The chain of administration from the Minister level of government down to those who deal with the actual housing occupant leaves much to be desired. It is demonstrably not conducive to the full utilization of agreed upon allocations.

We suggest a simplification of the present complex array of housing schemes, so that they might best serve the objectives of government housing policies. The principle of reorganization is based upon the significant distinction that exists between families that need subsidies and those that need only loans. We point to the need for a more rational and equitable way of distributing subsidies, such as a combination plan of subsidy and private enterprise. A rational system of housing subsidies requires that the purpose of and the gains to be desired from public assistance be clearly understood. An equitable system requires that subsidy should be related mainly to capacity to pay. Giving more subsidy than is required wastes resources, and giving one family less than another, with the same or greater income, is discriminatory.

In many respects our most important recommendation is that there be established a new system of housing finance to help convert the lower middle class's drive for a better home into an increased flow of funds available for housing investment. A more effective organization of the housing finance sector would not only enlarge the aggregate pool of housing resources, but would also be able to serve the housing requirements of families lower down the income scale and reduce the "handling costs" of mortgage funds, which now add unnecessarily to interest rates. Next to finance, the most serious obstacles to an expanded housing program are an outmoded building industry and government restrictions on the use of urban land. Despite the low wage rates prevailing in the construction field and the building materials industry, the final product is relatively expensive by western standards. Much can be done to reduce the labor costs and to improve the quality and the volume of building materials.

The ultimate solution lies in comprehensive urban planning, in the development of public transportation, and in the creation of new urban growth modes. But these are far-off achievements.

We suggest that the rent control law be studied to determine whether modifications are necessary to offset a possible progressive deterioration of the housing inventory. The urban property tax system-both structure and administration - may be in need of reform. Is there any unduly heavy tax burden on new housing relative to old? Vacant land is subject to little or no tax, thereby contributing to speculation and rising prices. The property tax system is too complex a subject for quick remedies, but we urge a thorough review of the field.

We counsel against any blanket restriction on the construction of luxury housing. Although such proposals are well intentioned and designed to release resources for low and middle-income housing, the net gain is likely to be more symbolic than real. The volume of luxury construction is not large and much of it will have been built in any event to serve the ever increasing staff of foreign embassies, missions and corporations.

A NEW HOUSING FINANCE SYSTEM

The enduring shortage of resources for financing urban housing is only another way of saying that Pakistan is a still-developing country. It is therefore necessary to search out every way of adding, however marginally, to the pool of housing capital. It is also necessary to reduce the present high handling charges of transferring housing capital from savers to borrowers. There is a need for a better organized capital market for obtaining mortgage money. While additional savings will eventually have to serve many sectors, there is at least a better potential than in the past for an increased flow into home financing institutions. The desire for a better home stands high on the preference list of Pakistani middle class urban families; they seem more willing to put their resources into housing than into other kinds of assets. Thus, the lure of a new house could attract significant amounts of new savings either from non-institutional sources or from further reduction in consumption. The doctrine that there is a rigidly fixed pool of savings for which all sectors must compete has never been validated; on the contrary, experience shows that the rate of savings is elastic and will respond to various stimuli. If the opportunity to participate in a home financing plan proves to be such a stimulus, a new savings institution for housing will not divert, but will complement the efforts to stimulate major national development projects.

Implicit in their Third Plan projection is a substantially higher volume of mortgage lending activity. This follows from the projection for increased public and private residential plans which depend upon mortgage finance. Therefore, unless the Government is prepared to legislate a specialized mortgage finance system that will serve the public interests, too much of the added demand for home mortgage funds will either seek satisfaction from unorganized fund sources with its high interest, short maturity loans, or will impose still higher demands for capital from the public (or government) sources. A need for increased volume of housing production in the face of a shortage of unutilized urban land will necessitate an increase in the scale of housing projects. More and more, the construction of custom homes must give way to large subdivisions and apartment developments, in which cooperative housing societies will play an important sponsorship role. This is, on the whole, a healthy trend. Large scale land development and residential construction will bring many badly needed economies. But mortgage financing of large scale projects requires a greater technical expertise than individual homes. Most cooperative housing finance institutions cannot

now muster staffs competent to deal with land plotting, building materials and construction methods. Mutual finance institutions, with adequate qualified staffs, could provide useful services to individual and group borrowers who are ill-equipped to cope with the difficulties of building homes.

The present system of institutional mortgage finance cannot deal adequately with current mortgage demand, much less with higher demand in the future. Except for the life insurance companies and the House Building Finance Corporation, the existing housing finance societies and similar mortgage intermediaries are too small in scale and are only rarely professionally managed. As a result, their unit operating costs are excessive and money handling charges are superimposed on an interest rate that is already too high for the lower middle class. There is a growing realization on the part of some officials that the existing cooperative housing finance system requires a major reorganization to meet the requirements of the present as well as the future. In other words, the time seems ripe for great innovations in housing finance.

GUIDELINES

If scarce housing is to be conserved for those who need it most, some reshaping of existing programs is inescapable. The following guidelines are proposed. First (and perhaps most controversial) is the gradual abandonment of occupational tests for eligibility. The extent of a family's housing needs and its capacity to pay for housing should be the primary yardsticks for determining the amount of aid forthcoming. This means, essentially, that government employees and industrial workers should be treated no differently from any other sector of the urban population. Housing aids for government employees are, of course, a kind of supplement to civil service salaries, but there is no reason why part of the costs of operating the government should be levied as a charge against limited housing funds.

There is little justification for the favored treatment of industrial workers under the Industrial Housing scheme. Where industries are established in sparsely populated areas, it may, of course, be necessary to make some kind of government aid or employer subsidy available to assure an adequate supply of housing for the labor force. Where industry draws its labor from existing urban centers, however, there is no more justification for special aids to factory workers than for any other lower income family. Here again, housing need and capacity to pay should be the determinants of eligibility.

Second, the existing housing programs should be regrouped into two classes based on the distinction between the loan and the subsidy. This distinction is not always clear. Loans are a recoverable aid for which the government is, at least ultimately, fully reimbursed; subsidies constitute an immediate charge against current and future tax revenues. Although there is an overlap between the two types of aids, each deals with essentially different types of families, different types of housing and requires a different kind of administrative structure. Intermingling these programs tends to conceal their fiscal impact on the national economy.

Regrouping and consolidating the program into two classes would facilitate the establishment, within each class, of more equitable standards for eligibility and more equitable relationships between income and monthly housing outlays. A separately organized loan program could be better coordinated with the emerging private and quasi-private mortgage systems, which we hope to see strengthened by means indicated later on in this report. A number of families now covered by the subsidized housing scheme would have the capacity to

pay their own housing costs if mortgage financing on liberal terms were to become available. If these families could be served by the private sector, more public housing funds could be made available for the rehousing of low income families and slum dwellers.

An equitable distribution of subsidies is strongly recommended. This means, specifically, that income limits for continued occupancy should be firmly established, that there should be periodic re-examination of tenant income, that surcharges should be imposed on those with capacity to pay higher rents, and that rents should be equalized in projects of comparable quality and amenities. Families whose incomes rise to the point where a subsidy is not needed should be induced by the penalty of rent increases to shift from the subsidized sector into one of the loan programs where new financial aids will offer them assistance.

Finally, there should be revision of the subsidy formula from a lump sum capital grant basis to a system of annual payments which would reduce annual capital expenditures by the central government.

SELF HELP FINANCING

Sind Industrial Trading Estate

It is proposed to allocate approximately 6000 plots for self help housing wherein each home owner will build his house complete, excluding off site utilities. The lending institution will commit for a loan to cover the total cost of building material. The site organization will establish a separate department or division to be known as self help enterprises which will be manned by expert technicians who will direct, supervise and control the purchase and application of material necessary to complete each accommodation.

There appeared recently in the New York press, an article referring to slum therapy in Indianapolis, Indiana. Low income families, through an ingenious system of group building of houses, have transformed dozens of wooden tenements to new and attractive frame and brick homes. This initial venture was completed without government subsidy, although one is being sought now.

Flanner House Homes, a private self help organization, was formed in 1945. Indiana businessmen contributed much of the \$200,000 revolving fund used to purchase materials, and the city's largest banks did the mortgage financing. It is interesting to note that most of the 397 men involved in the work had never used a tool before, but their success in transforming their immediate community and their pressure on city hall to provide a neighborhood school and swimming pool has attracted to the area private developers who have built homes on adjacent land.

The key to the process is an elaborate assembly line process developed with the help of Purdue University. Men worked 20 hours per week in the evening, in addition to holding their regular jobs. Groups were of at least 20 persons, each performing a specialized function. Completion of a house took nine to twelve months, most components prefabricated at the factory on large frames. Lumber was ordered pre-cut to specifications and was color coded to eliminate the need for blueprints. Supervisors provided instruction and technical aid; plumbing, heating and electrical wiring was done by outside contractors. This form of "sweat equity" made possible something that would be financially unattainable for these people.

The homes required no down payment - except the 900 work hours contributed by each man. The homes market for about \$14,000. with mortgages, FHA insured, of up to \$9,500--on which the carrying charges are about \$90 per month, all inclusive. (principal, interest and taxes.)

THE NATIONAL SAVINGS AND HOME FINANCE ASSOCIATION
OF PAKISTAN
(A Mutual Organization)

Objective

To advise and assist the government of Pakistan through its Karachi Development Authority and other interested institutions in the establishment or strengthening of the means for financing housing - and in the improvement of administrative plans for low cost self-help housing---specifically through making available public and private financing for low cost shelter.

To recommend alternate economical ways to finance self liquidating workers' housing.

To illustrate how a national savings and loan system could stimulate savings for lending on dwellings.

These objectives were further strengthened by a directive from the Finance Minister that a national system of appropriate financing be placed on a private entrepreneurial basis that might relieve the government of the cost of major financial support of building and construction.

We have reviewed briefly the existing structure of the East and West Savings and Loan which was organized and supervised by the Hussain and D'Silva Institutions. This organization has not yet been able to make much progress. We have also reviewed the structure and objectives of the House Building Finance Corporation which was chartered by the government under the House Building Finance Act of November 1952. It appears that this corporation has reached an impasse due to the fact that funds allocated by the government for lending purposes have been exhausted. (See special addendum attached: "Credit Facilities", issued by the Planning Commission of the Government of Pakistan, 1964.)

We are recommending the organization of The National Savings and Home Finance Association of Pakistan, a mutual organization to be organized and managed completely by the private sector. This title was chosen to indicate that the Association should be a counterpart of those in the international movement whose primary function is the acquisition of savings from the public and the

lending to those funds on home loans. That it is appropriate that such an institution be chartered in Pakistan is substantiated by the fact that there now exists the International Union of Building Societies and Savings Associations with members in 37 countries around the world. The next meeting of this group will be in Brisbane, Australia, in October 1968.

Functions:

The Association, which would be primarily a private enterprise, would have three functions:

1-It would attract savings from the public, not exclusively from prospective home seekers; but also from private industrial corporations as well as government employees -- in other words, all sectors of the population - savings being the prime source of funds to be loaned for home building.

2-It would make practical the home finance lending process, reduce handling costs and make more efficient the conversion of savings into mortgage loan investments. The primary investments would be loans on new construction to individual families and cooperative housing societies.

3-It would provide its borrowers and others with technical services to assure adequate and qualitative construction at the lowest possible costs. Clients would be advised as to building and transfer costs, lending charges, budgeting policies, activities of promoters and speculators in land, and the practices of commission/brokerage in connection with building supplies. Technical advise should be on a no cost, no profit basis. The association would work closely with the K.D.A. to help borrowers take advantage of the prices of materials bought in bulk.

Organization:

Initially, the Association would be located in the district of Karachi and expanded through either a network of branches or independent units in principal urban centers of Pakistan. This would require an enabling act of the General Assembly, and later on in this report under the title "Legislative Direction Memorandum", we shall discuss and schedule the various items that should be a part of this act.

In setting up the National Savings and Home Finance Association, it is recommended that the Minister of Finance appoint a committee of five public spirited citizens to become the nucleus of the organization. Their job in turn would be to seek out 45 other

public spirited citizens - the total fifty to be designated as organizers and/or charter members. These must become the initial savers of the Association by establishing passbook savings accounts. This group should generate deposits of not less than one million rupees which would represent the initial lending pool for housing. These depositors would receive dividends on their passbook savings for the use of their funds, but withdrawals would be restricted for the first two years of the Association's operation.

Each depositor in the Association should have the privilege of voting at an annual meeting on the following basis: for each passbook savings account of Rs. 500 or less, one vote--up to a maximum of 20 votes for Rs. 10,000. Dividends on savings accounts would be paid quarterly, semi-annually or annually, as may be determined. By giving these savers voting rights, there would be an added incentive to savers to become a part of this cooperative movement. Also, each home owner - borrower would be accorded the right of one vote at the annual meeting.

Directors and the Chief Executive Officer of the Association would be chosen by the committee of 50 citizen-organizers, with the approval of the Finance Minister. Directors would stand for re-election at the Annual Meeting.

The estimated initial cost of operations which is set at not less than Rs. 50,000 over the first two years should be borne either by the government or by the organizers. Such funds would be recoverable after two years of operation provided the accumulation of net earnings proved adequate.

Base Capital and/or Protective Fund

The base capital, which may be further identified as a fundamental reserve or protective fund is that which an organization must require in order to take care of any future losses. The amount of base capital, therefore, should be fixed by the Minister of Finance. We would suggest a reserve base equivalent to not less than 10% of the investment portfolio. If the ratio of reserves to investments falls below 10%, than the Association should have the right to issue debentures to supplement base capital.

The following sources of base capital are recommended:

- 1-The Pakistan government, a group of industrial corporations, and other donors to advance Rs. one million each (a total of Rs. 3,000,000) to be loaned on a long term basis of at least ten

years to be repaid at 1% interest.

2-A special issue of debentures by the Association, guaranteed by the government in order to make them readily marketable, offered for purchase by private industry, banks, life insurance companies and the public. These debentures could carry a ten year maturity - the interest rate to be sufficiently attractive to lure funds from other sources. These debentures would carry the same rate as the dividend rate paid to savers.

As a going concern, the Association should have a base capital structure and/or a protective reserve fund equal to 10% of its total investments; and such funds should be invested by the Association in short term liquid securities; i.e. central government obligations. There should be a limitation as to what part of these reserves could be expended for physical quarters. Also, there should be a requirement that the Association allocate on an annual basis, 10% of its net earnings to the protective reserve. We further suggest that the authorized base capital be not less than Rs. 5 million, in order to effectively sustain the heavy costs and early operating deficits while building an adequate protective reserve from earnings.

Savings Capital for Lending

Over and above the initial savings derived from the committee of organizers, the government of Pakistan should make funds available to the Association in order to give its initial impact in the lending field the strength that it needs. It is recommended that the government and the other donors advance the association a specified sum of rupees on a one for three basis, matching passbook savings from the public. This system was adopted by the U.S. Government when it authorized the chartering of Federal Savings and Loan Associations. These monies, of course, are to be repaid within ten years at approximately 1% interest. It is further recommended, that upon the granting of Charters to Associations, the government and the other donors advance an initial Rs. 5 million for immediate lending, such loans to be repaid at 1% interest at a time when savings growth reaches a satisfactory level. Limitations on the maximum amount of such advances would be determined.

The reason we are suggesting loans by both the government and other donors is to assure a large volume of financial base so that lending can begin immediately in sufficient volume to have a real impact on the economy.

Savings bonds, if properly promoted, could also become a major source of funds. Although presently, the per capital income is low, limiting individuals' ability to save - it is steadily increasing as a result of the work done by the government and other donors in improving the productivity of the people and in the establishment of industry and the promotion of better agricultural methods. It has been proven that these people can and do save, as evidenced by the substantial amount of savings in the commercial banks. They will save more as their incomes increase and the facilities of the savings and loan association in the promotion of savings are made more widely available to them.

Funds which will constitute the Association's principal assets will come from savings of the public, a prorated share of which, for lending purposes, will be earmarked for lower and middle income housing for industrial workers.

To acquire these funds, it is suggested that:

1-All government workers (45% of the total work force, according to a survey for the year 1964 conducted by the two Provincial Labour Directorates and quoted in the Pakistan Times of November 5, 1967.), whose income exceed Rs. 500 per month, be subject to a mandatory payroll deduction program at an established percentage of their salaries. We understand that all government workers are given a home for their use during their tenure at a very nominal rent equal to approximately 7-1/2% of their salaries. Their participation in this program, therefore, would help to assure basic housing to other individuals. We further understand that when these government employees retire at age 55, they must vacate their premises. Therefore, when funds become available in later years, the Association would also be able to lend to these same government workers who might desire shelter loans. In any event, monies accumulated on deposit through these mandatory payroll deductions could provide these workers with a nest egg or pension fund at time of retirement.

2-Membership shares should be offered to cooperative societies to provide them with a source of capital for making home loans.

3-Substantial deposits should be made by Pakistani industrial corporations or proprietorships in the proposed association in order to make possible housing loans for their workers. Rather than putting these funds on a voting basis as in the case of individuals, we would

suggest the issuance of savings certificates or debentures, on the assumption that these will represent sizeable deposits with long maturities at nominal interest rates.

(Note that First Federal Savings and Loan Association of New York was organized in 1934 for the purpose of acquiring savings and providing funds for home lending. It received from industrial corporations in the immediate Rockefeller Center area of New York City funds which stayed with the association in some cases for as long as 15 years.)

4-Corporation payroll deduction plans should be developed in order to assure workers of the necessary down payments when they are ready for home financing.

5-Appeal should be made to the bachelor worker (purported to be 40-60% of the work force who comes from outlying areas to work for perhaps a year and then returns to his farm to marry) to plan his future security around personal savings.

6-Prospective home buyers who are expected to be the prime source of savings funds be persuaded that, with regular weekly or monthly savings they will be able to acquire a down payment on a home, and will establish their eligibility as a borrower.

7-Tax advantage be provided for savers. Savers should not be required to pay taxes on savings balances up to the first Rs. 5,000., and should also receive tax exemption to the extent of the monthly amortization and interest payments on mortgages.

8-The Association should not be authorized to accept demand deposits, but that authority be given, however, to enter into participating arrangements with commercial banks in short term construction loan lending.

Insurance of Accounts

Each savings account should be insured by a special agency of the central government, such insurance to guarantee each savings account up to a maximum of either Rs. 10,000 or Rs. 20,000. This is essential to provide the public with full confidence in the savings movement.

The base capital of the Insurance Agency should be furnished by the government, the Association to be assessed 1/8 of 1% of its

total insured savings balances annually. When such insurance fund reaches 2% of the total insured savings, then the cost or expense can be modified on the basis of experience.

We wish to call your attention to the fact that the U.S. Government set up two such agencies in 1943, one for commercial and savings banks, and another for savings and loan associations. (U.S. Government chartered savings and loan associations are required to be members of such insurance agency.) The amount of insurance per account was recently increased to a maximum of \$15,000. The advent of this type of insurance was primarily responsible for the growth of the home finance business in America.

Interest Rates

Passbook savings should earn interest at variable rates, to be determined by competitive conditions and/or control and approval of The State Bank of Pakistan. The rates paid on passbook deposits should be graduated in accordance with the duration of the account and the regularity with which deposits are made. Savings plans of a longer term shall command higher rates, as should those with more frequent systematic deposits.

It is suggested that in the initial stage of the Association's operation, the rate paid to depositors should exceed by a slight margin the actual rate paid by commercial banks on savings and time deposits. Another competitive edge might be to prohibit commercial banks from paying a higher rate on balances of less than Rs. 10,000 or Rs. 20,000. Presently, in the United States, commercial banks are not permitted to pay more than 5% on deposits of under \$100,000. (Rs. 500,000.). Above that, they are permitted to pay 5-1/2%. Savings and Loan Associations are permitted to pay 5-1/4% on savings certificates of \$1,000. or more with a minimum duration of six months. This differential between mutual institutions and the commercial banks makes it possible for savings and loan associations in America to attract the small saver.

All interest rates, either paid on deposits or charged on loans should be subject to the approval of The State Bank.

Interest rates on mortgage loans to lower income workers should be limited to 5%. Middle income workers (those earning more than Rs. 1000 monthly) should pay not less than 6%.

Loans on passbook savings accounts (up to 90% of balances) should be charged at a rate of 1% above the interest rate received on savings.

Interest rates on systematic savings should be higher than the normal passbook rate, subject to penalty, of course, should the systematic savings arrangement be discontinued.

Mortgage Lending

It is suggested that rather than have corporations build their own housing facilities for their workers (which in effect means immediate capital outlays to the extent of the cost of construction) the new lending institution lend to the industrial enterprise the cost of construction - setting it up as a long term mortgage to be liquidated by the corporation at regular monthly intervals over a period of 20 years. It is further suggested that if this program were adopted, all such loans be guaranteed by the government.

In lending to low income workers, it is recommended that some system of guarantees be made available to the lender by either the government or the industrial corporations. This recommended National Savings and Home Finance Association could then, in due course, become Pakistan's chief vehicle of self supporting low and middle income home financing; all other forms of housing activities such as planning, sales and land development could be left to existing agencies.

The lending program would be simplified if the value of land could be determined on a reasonable market value basis. The fact that vacant land is not taxed, either from a real estate or capital gains standpoint, allows speculation to the extent that prices far exceed the land's basic value. In the meantime, the lender must assume a value that is proportionate to total value in arriving at an appraisal and subsequent debt ratio. It would seem logical that valuation of land from a market viewpoint and for tax purposes would not only yield much needed revenues, but would stifle speculation and allow the cost of land, improved or vacant, to become realistic. It is also recommended that the Association make its loans only on the value of the construction (including utilities, walks, streets and other land improvement costs) and not on the raw land...the purpose being to reduce the incentive to land speculation and inflation of land cost.

We would recommend that the State Bank establish a line of credit with the Association so as to assist and help it over seasonal needs for funds. This would insure a steady flow of funds into home building markets as demands dictate.

Mortgage Insurance

We recommend that further study be made before a special agency to insure mortgage loans be set up.

The existing program in the U.S. called the Federal Housing Administration was instituted in 1934 and was instrumental in getting mortgage and construction lending off the ground, as well as in creating employment opportunities in the fields of material sales and manufacture and house construction. The U.S. program was self sustaining in that the cost set at 1/2 of 1% was paid by the homeowner. The program guaranteed mortgage loans on homes up to 100% of the outstanding balance at time of foreclosure, and the guarantee was in the form of a debenture issued when the property was acquired by the lender and turned over to the government. These debentures, which are government obligations, are readily marketable and may be sold at any time. The mortgage insurance plan permitted considerable flexibility in lending and established uniform patterns of appraisal and mortgage lending on a national basis. The FHA program in the U.S. also created a national secondary market for mortgage loans, whereby loans were made, bought and sold by institutions throughout the country.

Audit and Control

The audit, supervision and control of the new Association should be under the jurisdiction of the State Bank.

LEGISLATIVE DIRECTION MEMORANDUM

The National Savings and Home Finance Association of
Pakistan
(A Mutual Organization)

Business which the Savings and Home Finance Association may Transact:

1-The Association may grant loans to borrowers for the purpose of constructing homes, purchasing land on which a house is to be constructed, and/or purchasing existing dwellings.

Conditions for Grant of Loans:

2-No loan shall be made unless it is secured by a mortgage, hypothecation or assignment of the land and the house to be constructed thereon or by such other immovable or movable property of the borrower or of his surety or of both as may be prescribed.

3-All loans for construction shall be made in suitable installments concomittant with the construction of the house.

4-No property shall be accepted as security unless it is free from all encumbrances and charges. Title to fee should be guaranteed. Owner of property should have the right to sell property subject to existing liens. Lender should have the right to approve the credit of the purchaser. If the land and/or the building has been subsidized, then the proceeds of any profit from the sale shall be applied toward reducing the subsidy, i.e. the costs of off site utilities, a reasonable cost or evaluation of the plot, and any other form of subsidy.

5-The Association may subject loans to a maximum limit, based upon security; grant additional loans to any borrower on the security of any property already mortgaged with the Association and offered by that borrower and accepted by the Association as security for that purpose.

6-No loan shall be made to any borrower unless he satisfies the Association that the terms upon which he acquired the land on which the house is to be constructed, or the terms of the lease under which the land was made available for construction of the house are satisfactory and that the area in which the house is to be situated have been adequately planned.

7-No loan shall be made unless the Association is satisfied:

(a) that the borrower will be able to provide the necessary funds which added to the loan made by the Association will cover the entire cost of the construction of the house;

(b) that the borrower (or his surety, or both, as the case may be) and where the borrower is more than one person, any one or more of such persons and/or their sureties, will have sufficient means to repay the loan during the prescribed period in the prescribed manner;

(c) that adequate care has been taken to ensure that the house would be of suitable design and of sound construction, and of a type which would assure a minimum of practicable expenditure for repairs and maintenance during the term of the loan.

8-A home owner should not be required to furnish additional collateral if value of land depreciates. However, lender should make a realistic appraisal of the land and building before committing for the loan. In the meantime, the lender should demand adequate maintenance of the premises. There should be a waste clause in contract where failure to maintain would result in default and foreclosure.

9-The loan shall be repayable in monthly installments sufficient to cover the principal and the interest and urban real estate tax in such manner as may be prescribed. Lender should require adequate fire insurance as mortgagee.

10-No loan shall be given for a period exceeding 20 years. Suggest maturities could no longer in the case of extreme necessity if the debt ratio does not exceed 50% of appraisal.

11-Every agreement between the borrower and the Association shall provide for the period within which the construction of the house shall be commenced and completed. Said period shall not exceed six months with extension not to exceed twelve months at the option of the lender.

12-No information given by any person applying for financial assistance and communicated to any of the directors or employees of the Association shall be disclosed by or used by such directors or employees except for the lawful purposes of the Association without the written consent of such person.

13-No loan shall be given to any borrower, unless it conforms to such conditions as may be prescribed.

Limit on Loans

14-The Association shall not grant any loan which is less than Rs. 2,000 or which exceeds Rs. 20,000 - or an amount sufficient to cover the cost of construction, whichever is less.

15-The Association may require the borrower to pay application and inspection fees at such rates as may be prescribed as well as miscellaneous reasonable out of pocket expenses incurred by the lender.

Power to Impose Conditions:

16-The Association shall make such agreements with borrowers as may be deemed necessary or expedient to safeguard its interests.

Prohibited Business:

17-The Association shall not:-

- (a) accept any demand deposit - only savings and time; or
- (b) subscribe directly to the shares or stock of any company; or
- (c) undertake construction of houses

Provided that nothing in the clause (b) shall affect the right of the Association to acquire the shares or stock of any company accepted as security from the borrower.

Rights of Association in Cases of Default:

18-When the borrower (or his surety) makes default in repayment or otherwise fails to comply with the terms of the agreement (or letter of guarantee) with the Association, the Association may sell or realize upon any property pledged, mortgaged, hypothecated or assigned by the borrower (or his surety) to the Association by way of security.

19-Any transfer of property made by the Association in exercise of its powers shall vest in the transferee all rights in or to the property transferred as if the property had been sold to the transferee by the owners.

20-All sums due the Association from a borrower (or his surety) shall be recoverable as arrears of land revenue.

Power to Call for Payment Before Agreed Period:

21-Notwithstanding any agreement to the contrary, the Association may, by reasonable written notice, require any borrower to whom it has granted any loan (or his surety) forthwith to repay the loan in full:

(a) if it is found that the loan was obtained by information supplied by the borrower (or his surety) which was false or misleading in any material particular; or

(b) if the borrower has committed a breach of the terms of his agreement with the Association relating to the loan; or

(c) if the loan is not being utilized for the purpose for which it was made; or

(d) if the house is not constructed and completed within the period allowed in the agreement between the borrower and the Association and the failure is not due to causes beyond the control of the borrower; or

(e) if there is reason to apprehend that the borrower (or his surety) will be unable to pay his debts or may go into liquidation; or

(f) if the property pledged, mortgaged, hypothecated or assigned to the Association as security for the loan is not kept in a proper condition by the borrower (or his surety); or

(g) if, for any other reason, it is necessary in order to protect the interest of the Association.

Special Provisions for Enforcement of Claim by the Association

22-Where by reason of the breach of any agreement by the borrower the Association becomes entitled to require the immediate payment of the amount due by the borrower to the Association, any officer of the Association authorized generally or specially in its behalf may apply to the District Judge within the local limits of whose jurisdiction the borrower's house is situated for any one or more of the following reliefs, namely:

(a) an order for the sale of any property or properties pledged, mortgaged, hypothecated or assigned to the Association

as security for the sums due by the borrower;

(b) for an injunction restraining the borrower (or his surety) from in any manner removing, transferring or disposing of any of the properties referred to in clause (a);

(c) for an ad interim attachment attaching the properties referred to in clause (a) above and such other properties of the borrower (or his surety) as in the opinion of the District Judge are sufficient to cover the claim of the Association against the borrower including costs and interest.

23-An application shall state the nature and extent of the liability of the borrower (and his surety) to the Association, the grounds on which it is made and such other particulars as may be prescribed.

24-The District Judge may if he thinks fit hear the applicant and where the reliefs mentioned are prayed for in the application shall pass ad interim orders granting such reliefs as the full claim of the Association against the borrower.

25-At the time of passing his orders, the District Judge shall order notice of the application to issue to the borrower (and his surety) together with copies of the application, the order passed by the District Judge, and any evidence which may have been recorded at the time of the order, calling upon the borrower (and his surety) to show cause on a date to be specified in the notice, why the interim orders passed should not be confirmed and the reliefs sought in the application be granted.

26-If no cause is shown on or before the date specified in the notice under section 25, the District Judge shall dispose of the application.

27-If the borrower (and/or his surety) appear and show cause, the District Judge shall grant them and the Association reasonable opportunity to produce their evidence relating to the reliefs claimed in the application; and after considering such evidence and hearing the parties the District Judge shall pass his orders disposing of the application.

28-When passing his order the District Judge shall:-

(a) record his finding as to the amount due by the borrower to the Association, and the interest payable thereon;

(b) direct or refuse to direct the sale of the properties;

(c) confirm, discharge or vary any ad interim orders passed restraining the borrower (and/or his surety) or attaching their properties.

(d) pass any other incidental orders.

29-No orders passed by the District Judge ordering the release of any property of the borrower (or his surety) from attachment shall be given effect until after the expiry of 30 days from the date of that order except with the written consent of the Association.

30-An order under this section for the attachment or sale of property shall be carried into effect as far as may be in the manner provided in the Code of Civil Procedure, 1908, for the attachment or sale of property in execution of a decree as if the Association were the decree holder.

Note: Portions of the above have been excerpted from an extract of the House and Building Finance Corporation Act of 1952, the substance of which we feel should become a part of the enabling Act authorizing the formation of the proposed National Savings and Home Finance Association of Pakistan.

A CENTRAL MINISTRY OF HOUSING

Whatever may be the priority of worker housing in Pakistan's developmental strategy, allocation of resources will not be used to full advantage unless there is a centralization within the Government of Pakistan of all the major government programs involving housing and its allied sector, town planning.

As most Western countries have learned, a national housing and urban planning program requires an undivided national ministry, adequately staffed and free to devote all its energies in the single task of producing more housing. Such a housing ministry should be made responsible for meeting national housing goals, and should have the powers needed to attain these goals. Its scope should include not only the officially designated housing schemes; but, unless there is an over-riding reason to the contrary, all public sector housing, particularly in the employee housing program now administered separately by other agencies and public enterprises.

There is little justification for separating Housing and Town Planning. Today, urban planning has a different role. It has become an instrument for arranging optimum land use arrangements, for developing new towns and for designing transportation systems that will link jobs and residences.

Housing is crucial to all these considerations. To be sure, for Pakistan with its huge population in slums, health measures such as pure water system, adequate waste disposal and the creation of open spaces will always remain a crucial concern. But the modern view is that the planning of community facilities is subordinate to urban planning's larger role.

The housing team has had too much experience with government to believe that the mere reshuffling of official portfolios will, by itself, accomplish much. A Central Ministry of Housing and Town Planning must also be given vigorous leadership, prepared to do battle for its program, and an adequate voice in the counsels of the top. Whether the Ministry should be elevated to cabinet status is a matter for the Government of Pakistan to decide. Needless to say, a position in the cabinet would be a declaration that housing and urban planning are to be accorded a more prominent place in the Fourth Plan.

The Establishment of District and Central Housing Boards

It is recommended that statutory housing boards be established in all major districts, whose activities would be coordinated by a newly created Central Housing Board.

Statutory Housing Boards resemble the Public Housing Authorities of hundreds of American cities, and have a wide range of responsibilities. They are operating agencies which build and manage publicly sponsored housing projects, acquire and develop land, clear slums, receive and administer most of the housing scheme funds, and in some cases, manufacture building materials. The advantages of statutory housing boards go beyond administrative efficiency. They are also instruments for obtaining a significantly larger volume of housing. Such Boards could help overcome one of the more serious impediments to Pakistan's current housing programs - namely, the tendency of central government to divert to other sectors the already limited funds allocated to housing.

There are many reasons why housing funds are turned over to different uses. Sometimes a budgeted project is delayed because a building site or building materials have not been obtained on the scheduled time. Sometimes, there is an unforeseen emergency that requires a temporary shift in budget allocations. Often the hidden reason is that housing does not seem as important to the central government as does transportation or electric power. Whatever the explanation, housing funds not fully utilized in the year for which they are allocated are permitted to lapse. According to present budgetary practices, a lapsed allocation can be reinstated only through protracted negotiations between central and district governments - the outcome of these negotiations is never certain.

A Statutory Housing Board, on the other hand, can operate with a consolidated fund so that all unused housing allocations will be carried over to future years. Of course, the existence of such a Board is not a total guarantee against the diversion of housing funds by a Central Government determined to do so. There are presumably some well-functioning housing authorities wherein the allocated housing funds tend to be more fully utilized than is the case elsewhere. In these cases, however, we presume that underspending in any one year is made up by extra activity in following years. Because the funds of the housing boards as such are earmarked by projects as well as by calendar years, there is greater assurance that planned projects will, in fact, be built. This in itself would be a significant gain. But in addition, it would allow housing administrators to engage in longer range planning - to acquire land

and materials for future use (often at lower prices), and to avoid the waste involved when a project is left to stand half-built for an indefinite period because anticipated funds have been diverted.

The establishment of Housing Boards in all districts would make it logical to have a Central Housing Board to regulate the activities of the District Boards. The Central Housing Board would also have operating responsibilities-executing and managing housing schemes in other territories. Another activity would be to administer the employee home loan programs of the various Pakistan Ministries. Many economies could be achieved and better service provided by concentrating such loans in a single agency. Finally, the Central Housing Board could coordinate new systems of housing finance institutions proposed in this report, relating its activities to those of the District Housing Boards, establishing targets and operating rules, and designating types of families to be served. The Central Housing Board should be attached to the Ministry of Housing, or perhaps the K.D.A. could be expanded to render this type of service.

LUMP SUM SUBSIDIES

Housing subsidies are usually given mainly in the form of a lump sum capital grant, rather than an annual contribution to bridge the gap between rent and rent paying capacity. Lump sum subsidies give the recipient a permanent subsidy, in contrast to a subsidy that can be adjusted periodically to the changed economic circumstances of the beneficiary. Thus, regardless of how high a family's income may rise, it will continue to benefit from a lump sum grant made years earlier. In an era of rising income, this means that many subsidized families will have higher incomes and yet be paying lower rents than others who are statutorily ineligible for admission to a subsidized project. Housing aids that could be used for the welfare of needy families are thus dissipated.

Another shortcoming of lump sum subsidies is that they impose a greater burden on current housing budgets than a subsidy that is stretched in annual installments over the economic life of a project and/or the life of the loan contract. Although ultimately the aggregate amount of subsidy will be similar, an annual subsidy permits more housing to be built out of a given allocation in the early years - when needs are most urgent - than does a lump sum formula. For example, a 50% lump sum subsidy of one million rupees per year may permit the construction of 400 units annually. Under an annual subsidy scheme with the same budget allocation, the subsidy would be used to amortize the investment. Instead of 400 units the first year, 800 the second year and so on, 5000 units could be financed and built during the first year, thus benefiting a much higher portion of needy families from the start.

ASSUMPTIONS

SELF-HELP HOUSING AND LENDING SUBSIDY

Loan	Rs. 5,000
Term	30 years
Rate	5%
Principal & Interest payment per month	Rs. 26.85
Maintenance & Utilities per month	<u>15.00</u>
Total Monthly payment	41.85
Borrower's practical monthly payment *	<u>30.00</u>
Government and/or industrial corporation subsidy	11.85 per month

*It is assumed that borrower earns Rs. 300 net income monthly, and that he can afford 10% of his net monthly income in mortgage payments.

RENT INEQUALITIES

Two families with identical incomes and occupying similar dwelling units do not necessarily receive the same amount of subsidy or pay the same rent.

For example, a large project is built in several sections over a period of years. Because of the steady rise in construction costs, a family which moves into the last section of a housing project will pay a higher rent than a family with the same income that happened to move into the first section. Rents should be equalized so that one family is not unduly benefited while another is unduly penalized.

Rents should also be adjusted upward as income rises. It is entirely reasonable that tenants whose income rises above established levels should either be required to make room for a lower income family or should be required to pay the full economic rent. The additional income could be returned to the pool of housing resources. Continued occupancy at a higher rent would be preferable if eviction would impose an undue hardship.

MODIFICATIONS IN RENT CONTROL

The need for continued rent control in the urban centers of Pakistan is widely recognized. Yet, present rent control legislation could have unintentionally harmful side effects. It could cause a progressive deterioration of existing housing, possibly at a rate faster than new housing is being built. It could slow down the slum clearance program. It could give rise to the "pugree" system of illicit payments from tenant to landlord and from sub-tenant to primary tenant. These illicit payments escape income and wealth taxes, and contribute to a climate in which government authority is flaunted and personal morality declines. Rent control also depresses the yield of the property tax.

It is recommended that modification might be along the following lines:

1-An official statement should be made by the Provincial authority, setting forth a clear policy with respect to the good to be achieved by rent control and specifying the conditions under which the Province or assessing authority will terminate controls, partly or fully.

2-A formula should be adopted to permit rent increases sufficient to allow a reasonable rate of return to landlords or funds spent for repair, rehabilitation and maintenance, to avoid deterioration of properties.

3-Eviction proceedings should be modified to permit owners to replace slum dwellings with new housing.

4-Consideration should be given to abandonment of rent control on all new residential construction.

MAJOR STUDY OF THE URBAN PROPERTY TAX

A press report of October 30, 1967 quoted the Minister of Information asking the local directorate of exercise and taxation "to be exceptionally lenient" while assessing the property tax in Karachi. He further stated that the new tax assessment would be "most rational, justifiable and correct". It would provide relief to the landlords of over assessed properties and, at the same time, check the landlords from trying to evade the tax through "illegal means".

The Minister said the principle of tax assessment would remain the same as established in the original statutory law, although the formula might vary from place to place. Brief observations of Pakistan's system of urban property taxes indicate it has some inequities - which adds to the rent of new housing and seems to encourage speculation in vacant land.

A major weakness in the real property tax is poor administration. The rate of tax delinquency is high. A reason, of course, is that the penalty for delinquency is not very severe. Many property owners regard the postponement of tax payments as an inexpensive loan from the government. It has been found that when the interest penalty for delinquencies was raised from six to twelve percent, the rate of tax collections was increased sharply. There is also some evidence that considerable amounts of taxable real estate escape the rolls altogether. The revenue yield to the municipal or local authority is further depressed by the fact that the tax liability of rent controlled property is calculated on the basis of the legal fictional rent of the dwelling rather than the rent actually paid.

Because existing real estate pays less taxes than it should, new real estate - including new housing - has to pay more. The average real estate tax per family in new houses and apartments seems to be high, which puts housing still further out of the reach of the lower middle class. The quality of public service is reduced and a larger burden is placed on plan funds for support of municipal undertakings.

Although there has not been time for an independent investigation, it appears that undeveloped land is not taxed in comparison with built up land - that is, a developed plot. If this is so, then this does contribute considerably to speculation in land, since owners are not penalized for holding their urban land off the market in the hope of future capital gains.

The urban real property tax is too complex a subject for quick surveys and superficial conclusions, since tax systems vary among localities, and there are different effective tax rates for different types of property.

It is therefore recommended that a thorough study of the urban property tax be made, looking to improvements in its administration, its aggregate yield and its equity - as well as to the elimination of any misallocation of resources.

Actual rent paid is the current basis of tax calculations for all buildings. The tax burden of sub-standard buildings should be raised to a more realistic basis of value, as should land with buildings be taxed on a more realistic and reasonable market value by the municipal or local authority.

Among the questions to be investigated are:

1-To what extent would a more efficient system of tax collections reduce the obligation of the Provincial Governments for municipal programs?

2-Would a split tax, applied in higher rates on land than on structures help bring down urban land prices? Could the same effect be accomplished by a betterment or "development value tax"?

In conclusion.....

If there is a desire on the part of government to encourage private enterprise to establish a specialized institution to finance home ownership and encourage savings for productive enterprise, it becomes imperative that the Government of Pakistan take immediate steps to not only enact legislative authority and issue a charter (perhaps under the House Building Finance Corporation Act of 1952); but more importantly, where there is a delinquent mortgage, it must adopt a workable and speedy foreclosure law which will permit the mortgage lender to take possession of the real estate and sell it either at auction or to a private party.

If neither is done, then the idea of the proposed institution should be abandoned.

V. AN ORGANIZATION TO DEVELOP A NEW COMMUNITY AT S.I.T.E.

A vast challenge awaits some appropriate organization at S.I.T.E. to build a new city to house 200,000 people with all facilities and services. Besides the land, a cost of Rs. 150 to 200 million may be projected, over a 10-year development period, preceded by a 2-year period of preparations.

Decisions concerning governmental organization, public finance and services will be needed promptly before auction can occur at S.I.T.E. The first decision will be to assign responsibility for sponsoring organizational and feasibility studies, a detailed program for development, and a competition to determine who shall design the community. Speed may be vital. The Karachi Development Authority, with its expertise, could do this.

The next vital organizational decision is to choose or create an effective authority for organizing the building and managing of such a large residential community. Essentially, the organization would substitute for 400 to 500 employers at S.I.T.E. as the agency relied upon to develop, build, and manage housing for employees there. We believe that the record shows that in such a location at least the land-development initiative, and usually much more of the housing initiative must be assigned to a responsible special agency to perform.

The industrialists at S.I.T.E. with minor exceptions (400 houses) do not provide housing for the 75,000 to 100,000 workers there. It is not unique in Pakistan for industrialists to house only a fraction of their workers. But it is unusual that only a token effort is made. We understand that industrialists at isolated locations have long been especially willing and active to house at least key workers. Abdul Aziz Anwar's Working Conditions of Laborers in the Textile Industry reports that in seven West Pakistan urban areas, other than Karachi, in 1964 employers owned 13% of textile workers' housing. (46% of the houses were owned by the family, 27% were rented, and 14% were rent free.)* The industrialists at S.I.T.E., after some prolonged negotiation, are now reported to be preparing to construct housing for their workers. Yet the industrialists at S.I.T.E. are most reluctant to construct and manage housing. Clearly there is a pattern here: The more isolated the area, the more necessary it is to provide housing to facilitate industrial expansion; and the more necessary it is the more quickly the industrialist builds housing.

*Abdul Aziz Anwar, Working Conditions of Laborers in the Textile Industry, 1964 p.103

Labor department officials at all three levels of the G.O.P. have described to us their policy, which calls for industrialists to provide housing for an increasing fraction of their workers, and not less than 25% by now. The policy has not been enacted as a statute and is not now binding on the employers at S.I.T.E. or elsewhere except that at S.I.T.E. the allotments of land in Labour Colony areas are solely for housing purposes.

The difficulties in achieving housing in this manner are evident. The alternative which we would recommend is an effective public organization to do the job. The organization would be financed in part by the industrialists whose total eventual financial contributions could be made equal to those they are supposed to make under existing policy. We discuss the nature of the organization in this chapter and the character of the employers proposed financial contribution in Chapter VII.

We recommend a policy which would provide the employer with an alternative to the present policy for industrial housing. We believe that the proposed policy is particularly appropriate for a location such as S.I.T.E. in the midst of a city, where inter-plant transfers of personnel may be in the interest of greater national economic efficiency and should not be discouraged by evicting such a family each time the bread-winner transfers to the plant of a different employer. The alternative is for the industrialist to make grants to a housing authority to aid in the housing of his workers, instead of building housing himself. His grants would be used in a comprehensive program, and payable as a series of annual payments varying with size of payroll as in social security schemes, rather than capital grants covering the total cost of a few houses.

This plan can meet most of the objections which industrialists at S.I.T.E. have raised to existing policy. They do not want to manage housing themselves; if they must, they want the power to evict. They don't want all the houses right at the plant. Organized labor agrees with them on all these points (but for different reasons, of course).

The plan to pool the housing program for all workers at S.I.T.E. is far superior in flexibility and relies upon skilled administration of a specialized organization. It makes possible rational priorities in selection of tenants. It permits treating all employers alike instead of penalizing large ones. It promises to do the whole job, not nibble at it. It substitutes efficiency for paternalism.

Whatever its organizational form, the organization should be an agency of the Government of Pakistan, and have as its managing director an outstanding career civil servant experienced in urban physical development. The corporation should have the power to incur debt, plan and develop the city, charge rents and fees, transfer leases, manage property, contract for services, and make arrangements for the ultimate transfer of appropriate functions to the Karachi Municipal Corporation and to Union Councils, and to negotiate with them. It is important that it have prestige. Its "papers" will have to clear rapidly to meet construction schedules.

It should be successor to S.I.T.E. and the industrialists in possession of the leases to non industrial land at S.I.T.E., should receive as an annual grant for housing the proceeds of a tax calculated on the basis of the payroll at plants in S.I.T.E., and should receive for public improvements and services in the years of rapid development practically all of the 23% charges and tax levy on land value in S.I.T.E. that could normally be chargeable to property for municipal services. We understand that outlays by industrialists for payroll tax and land value tax might both be deductible as expense in calculating income subject to tax.

In this way, S.I.T.E. and the industrialists at S.I.T.E. would be relieved of their individual obligation to provide housing for their own industrial workers. However, under provincial supervision those industrialists who have provided housing or wish to do so in accord with the plan and completion schedule for the new community could retain land allotments for housing, and would be relieved of a pro rata share of payroll tax. The housing authority would also receive annual grants, as will be discussed in (C) below, for housing from other sources again to further supplement rents and debt service paid by the occupants.

We understand that there may be five possible alternatives for the housing organization:

- A. A special housing corporation or authority to build and manage the S.I.T.E. housing area only.
- B. A special housing corporation or authority to build and manage housing within the jurisdiction of the Karachi Municipal Corporation.

- C. Further increasing the responsibilities of K.D.A. in the housing field, by assigning it the job.
- D. A provincial government agency to build and manage and a number of industrial estates, including one a S.I.T.E.
- E. Continuing to hope that industrialists, individually and working through S.I.T.E., will accomplish the task.

As indicated, we think that this last item is the least undesirable alternative. The choice of organizational form may not be easy, as each alternative presents certain difficulties. To continue the obligation of the S.I.T.E. organization and the industrialists to house industrial workers would compete with their overriding objective of developing land for industry. The assignment of responsibility to the Karachi Development Authority for house-building and management in such an area would appear to conflict with its other functions: (a) its function of developing and selling land to others (i.e., by making it a competitor for land with its customers), (b) its function of serving as a large public utility (it cannot afford charges of favoritism to its own properties), and (c) its function of reviewing area development schemes for their conformity with the master plan for the city as a whole (it cannot let its concern for certain housing developments outweigh this larger responsibility). Organizational identity should, then, be given the housing authority; whether or not it is created by K.D.A., so that K.D.A. may be protected from such charges.

The other alternatives offer at least as great problems. Creation of a provincial agency to develop and manage housing schemes within the Karachi area seems to conflict with the objective of devolving original jurisdiction to local bodies, implicit in Pakistan's Basic Democracies principle. It is conceivable that territorial focus might be case aside, and that a collection of dispersed industrial housing projects might be placed under a provincial corporation or agency concerned with housing. But such a corporation could not be expected to concern itself with the all-important questions of coordination among residential areas, workplaces and urban transportation. Creation of a housing corporation with its own identity, whether co-extensive with the Karachi Municipal Authority or for operation solely at S.I.T.E. seems, to us, most nearly free of conflicts of principle, but this may reflect our lack of understanding of additional considerations.

Because we are mindful of the links among houses, work-places, and the journey to work as mutually impinging elements, we see special need for a territorial focus for the housing authority. Such a system may be conceived at three levels: (a) within the S.I.T.E. area where 75,000 to 100,000 jobs and more than half the houses will be located side-by-side, requiring only local transportation, (b) within the central part of the Greater Karachi area (approximately the geographic jurisdiction of the Karachi Municipal Corporation) and (c) within the whole greater Karachi area. A corporation responsible initially either for housing and local street pattern at S.I.T.E. or within central Karachi, including S.I.T.E., seems appropriate, leaving to K.D.A. the questions of territorial coordination for greater Karachi as a whole.

In the Karachi Development Authority, Pakistan has a unique organization. Geographically, it extends over the whole of the vast Karachi Division, stretching more than a hundred miles inland from the ocean shore. Of course, its program centers in the Karachi District rather than in the tiny population of the geographically much larger District, Lasbela (the other District constituting the Division). But even the Karachi District is vast; the whole jurisdiction of the Karachi Municipal Corporation, for instance, is only a small fraction in the southern portion of that District. And, within the jurisdiction of the Karachi Municipal Corporation, the area of S.I.T.E. is, again, only a small part. Thus, the choice of form for the new organization is a choice of geographic focus as well as a choice of compatible functions.

Left to K.D.A., in any case, is the third territorial perspective, the greater Karachi area. It includes, besides central Karachi, the Korangi-Landhi area which is a large and fairly well balanced "house-job system" in its own right and at a distance so removed from central Karachi that few workers will commute, and these only with much complaint. As indicated above, an organization which serves such a vast area normally is reluctant to take on permanent responsibilities for small portions of it, with resulting competition with its own customers. Permanent responsibility for any one development would raise this issue in K.D.A. as a public utility corporation and town planning authority.

Whatever the choice of organization may be as housing authority for housing at S.I.T.E. there will, of course, have to be coordination of its operations with activities performed by K.D.A., by the Karachi Municipal Corporation, and by S.I.T.E. The situation is unusual at S.I.T.E. in that the housing authority would obtain its

land leases from the S.I.T.E. organization, not from K.D.A. as in most of the Karachi area. But the housing authority would obtain certain utility services from K.D.A. and K.D.A. would serve as the town planning authority.

Coordination with S.I.T.E. would also be important. The governing board of S.I.T.E. reflects the function of its management as an instrument for pursuing common interests of the government of Pakistan and of industrialists by providing a suitable physical environment. Thus the Commissioner for the Karachi Division sits as Chairman, and the government nominates additional members, but certain of these board members are industrialists holding leases within S.I.T.E. (For reasons related to the history of S.I.T.E., and of some value in coordinating policy, we understand that the Commissioner for the Hyderabad Division also sits as a member of S.I.T.E.'s board, and the Karachi Commissioner returns the favor by sitting on the board for the Trading estate at Hyderabad). The Managing Director of S.I.T.E. who is a senior engineer in the career service of Pakistan also sits as a member.

Relieved of direct responsibility for housing, S.I.T.E. should serve all the more effectively as a representative of the industrialists' perspective on matters of housing and the journey to work. Since the housing at S.I.T.E. will accommodate at best only a slim majority of the industrial workers at S.I.T.E., an appropriate posture of S.I.T.E. as an organization would be to throw its weight for better transportation and housing elsewhere in Karachi as well as at S.I.T.E. Indeed, if a payroll charge was made payable based on total payrolls one could be rather certain that the industrialists and the S.I.T.E. organization would find it important to spearhead further improvements in effective use of such charges. But some organization needs to be primarily devoted to the residential development, and then to negotiate with the S.I.T.E. organization respecting land and utility extensions.

In the long run, the question of coordination may again shift back to the relation of the housing corporation to K.D.A., particularly with the housing and resettlement functions of K.D.A. The question might arise why, if a housing corporation is established, it should not manage (and eventually complete and equip) the housing projects inherited by K.D.A. from the refugee and resettlement programs of 1947 to 1964. At stake would be the six projects from before martial law: at Landhi within the Korangi Municipal boundaries, at Malir and at Malir Extension, at Drigh Road, and the two projects

within the boundaries of Karachi; plus the two vast projects dating from the martial law period, Korangi, in what is now Korangi Municipality, and N. Karachi, now divided between the jurisdictions of two town councils.

These housing projects offer large, burdensome problems of management, which might break the back of a fledgling organization if it were to take on the assignment all at once. Nevertheless, there has been talk for some time about setting up a housing authority to relieve K.D.A., and to clarify its role. Transfer of these estates to such an authority is essentially what such talk implies. No doubt the alternative to an authority confined to S.I.T.E. is an authority given responsibility for most or all of these, whatever other responsibilities it might have.

VI. PROVISION OF MUNICIPAL SERVICES

In brief, this section is concerned with the fact that to serve up to 200,000 people, the present municipal services at S.I.T.E. will have to be reviewed, with an eye to a sharp increase in extent and cost. Although within the boundaries of the Karachi Municipal Corporation, the S.I.T.E. area does not now receive full municipal services from the Corporation. The tax or rental value is reported, therefore, to consist only of the 10% Provincial collection, plus the categories of levy the Corporation collects for such limited services as it supplies, but much less than the permissible 23%. The full set of municipal services and normal tax levies will be required, as in any normal city, as the population grows and as service needs ramify.

The full implementation of the Municipal Corporation's jurisdiction is apparently a long-term affair. During the period of development of the residential area at S.I.T.E., which we estimate at 12 years, we recommend that the housing authority be made the recipient of progressively increasing and eventually normal levies on property value that the levies be collected by the province and divided among S.I.T.E., the housing corporation, and the Municipal Corporation, looking toward eventual normalization of local government under the Municipal Corporation.

Municipal finance, services and organization impinge in several ways on the proposal to house the families of industrial employees at S.I.T.E. As has been evident at Karachi, when development reaches some very rapid rate municipal finance, services, and organization tend to become oriented to development, with all other objectives secondary. Like it or not, this situation must continue to be assumed in any realistic projection of near-future trends for Karachi. Since the number of "shelterless" people persists at half a million despite the housing of half a million of them in the last 10 years, it is clear that veritable "flows" of people are involved, both native to Karachi and immigrant from other parts of Pakistan and India. The projected annual rate of 6% growth underlines the continued support in Karachi for giving development the benefit of any doubt.

The local taxes and limiting regulations on the one hand, and the services, on the other have money values, in the sense that land subject to variations in them tends to vary in value, a higher land tax and more restrictive regulations tending to offset more service and vice versa. Thus the elements, land tax, and regulations,

land service, and land value from a "system". Drop 200,000 people into such a system and all elements of the system tend to vary, each impinging on the other.

The question for this Chapter is then, first of all, whether the "disturbance" to the system created by building a residential community of 200,000 at S.I.T.E. can be contained or channeled to react unfavorably or favorably upon the whole Karachi community, making the project a more "feasible" project.

Because one is never certain what the balance of advice and interest will lead to in local government, each land developer and builder typically tries to insulate his development from the rest of the system. Value of his land, however, being a market phenomenon cannot be totally insulated from trends in the market. The wise developer therefore tries to take this into account.

The trend of land values in Karachi, as in growing urban areas generally is up. The problem in development is to capture at least one's share of that increase, to get possession of leaseholds early enough, and to induce local government to utilize that increase as a revenue source without having to absorb more than one's own share of the tax.

Since the land leases at S.I.T.E. were given to that government organization, with housing as one of the purposes, the land long since set aside there for housing may be assumed to be available at zero price. This is assumed here, for the entire area of the two labour colonies, whether allotted to industry or not, except that the two small housing projects actually built are assumed to remain in the possession of the two industries concerned. Formal transfer to the housing authority of leases to the rest of the area will be required.

Sound development practice calls for acquiring any additional land earlier rather than later. The S.I.T.E. land not in the labor colonies and available is the rocky ridge that separates "Labor Colony 1" from "Labor Colony 2". It should be acquired by the housing authority from the S.I.T.E. organization. K.D.A., as town planning authority for such scheme areas, has a policy generally discouraging development on such ridges. But this seems aimed chiefly at single-story development. A plan calling for occasional high-rise buildings on the hill should be compatible with the town planning objective, so that some of that area should be assumed as available for high-rise development.

Although, as we have said, prudence demands that the question of additional land needs to be considered right from the beginning, the principle of insulating development from too many

other currents suggests that unless additional land is really vital the long-standing northwest boundary of S.I.T.E. be retained to bound the residential community as well. Similarly, unless overriding considerations develop, the advantages of retaining the long-recognized boundaries between the industrial and non-industrial areas in S.I.T.E. should be given great weight.

We proceed, then to the services and taxes available to the proposed residential community within the established non-industrial boundaries. The need for municipal services within the S.I.T.E. area will of course rise sharply and change in character as thousands of houses are built and 200,000 people pour in. Although S.I.T.E. lies within the recently extended boundaries of the Karachi Municipal Corporation, within S.I.T.E. (as also within K.D.A.-developed schemes) the Municipal Corporation is expected to render only nominal services during the period when development is occurring. S.I.T.E. itself presently supplies such municipal-type services as are required by the industries, drawing upon its own funds, including payments on industrial leases and development charges.

Meanwhile, taxes on the rental value of land within S.I.T.E. come to something considerably less than the full 33% rate that is theoretically assessable. Within S.I.T.E. the Province's full 10% is no doubt collected, but only a fraction of the 23% which a Municipality would normally be expected to collect when development is complete. Since we have less than full information on this we can make no quantitative estimate. Nevertheless we are optimistic that a conventional levy for municipal purposes against the great wealth already at S.I.T.E., plus that to be levied against the non-industrial portion, should sustain a level of municipal services appropriate to a model community of industrial workers and their families.

If the full permissible levies could begin promptly it should be possible to pay out of these taxes the cost of the public improvements needed for the development of the non-industrial area. If, as we think appropriate, debt is incurred to assure finances for a carefully scheduled, rapid construction of public works in the residential area, the full levy should permit rapid liquidation of these obligations, which should be callable.

Arrangements should be made for the Province to serve as tax collector and to divide the revenue raised from all of S.I.T.E., among (a) the S.I.T.E. industrial development organization itself, for services to the individual area, (b) whatever agency becomes the

authority responsible for housing development and management, and (c) the Karachi Municipal Corporation.

In this connection, it must be assumed that if the residential community is to control the rocky ridge it must also assume the costs. Fortunately, costs incurred in good development and adequate maintenance of open space tend to enhance community values and land values as well--and thus, in this case, the financial capacity of the residential community.

With the development of the residential community the jurisdictional situation should eventually be normalized. A transition to normal jurisdiction by the Karachi Municipal Corporation is assumed for the period after development. As indicated above, however, we propose that the housing authority's role as owner-developer, and also as manager of the properties, will be perpetual, at least for the term of the land leases.

Before the first land leases are transferred from the housing authority to purchasers, arrangements should be completed for periodic evaluation by the community, including provision for articulating and receiving that advice. Because in S.I.T.E., as in other special development areas, the usual procedures for advice of the people have been dispensed with (and indeed, there have been extremely few people) the machinery for such representation and communication must be built anew.

If the operations of the housing authority are made directly subject to provincial control, there is the precedent, established in the administration of the cantonments, for a cantonment committee, a special local body for representation purposes. We have not studied it, but understand that a statute has substituted selection by basic democrats for the former direct election of the five members of each cantonment committee. The cantonment committee is removable by a majority vote of the district council, as is true also of the council of a municipality.

The powers of such a Committee are relevant. The compulsory and discretionary function of the cantonment committee have been distinguished as follows:

Compulsory. The maintenance and lighting of streets, abatement of nuisances, regulation of offensive trades and practices, control of slaughter houses and markets, inspection and control of dangerous buildings, provision for wholesome water supply, registration of births and deaths, establishment of hospitals and clinics, prevention

and control of diseases, operation of schools, and initiation of fire prevention and control.

Discretionary: Provision of public parks, gardens, offices, sewage disposal, transportation facilities, power utilities and other measures to promote the health, safety and convenience of the inhabitants residing in the cantonment.

The Cantonment Ordinance also authorizes the cantonment committee to levy any tax, with the approval of the central government, that may also be levied by any municipality in the province in which the cantonment is located.

The compulsory functions of a municipality are not greatly different from those of the cantonment committee; the discretionary ones are more inclusive than for cantonments. They are:

...maintenance of sanitation facilities; removal of refuse; registration of births, deaths, and marriages, prevention of infectious diseases; installation and control of public and private water supply and sewage systems; maintenance of lighting of public streets; regulation of traffic and private vehicles; establishment of civil defense programs; control of offensive and dangerous trades; operation of educational institutions; enforcement of the compulsory education law; and the holding of fairs.

The municipalities also may be given specific declaratory (delegated) responsibilities.

Since the functions of the municipality are more diverse, demands for additional service may contribute impetus toward the eventual normalization of the Municipal Corporation's jurisdiction, beginning when the physical development is complete. The Province, observing the readiness of the Corporation to take over, can time the transfers of actual responsibility accordingly.*

The Province should also consider the degree of maturation of the residential area as a community. Among the wards that presumably will multiply as the number of residents increases at S.I.T.E., a Union Committee and eventually perhaps more than one can be anticipated. Besides such direct services as they perform they can be expected to voice the sentiments of the residents. The weight of occupant opinion will then be felt in decisions concerning the rate of normalization, and also concerning the policies of the housing authority. Organized expression in the Municipal Corporation can take the form of budgetary and other decisions, whereas expression of opinion will normally reach the governing board of the housing authority as complaints to the landlord or petitions, rather than as proposals for legislation.

*Garth N. Jones: See "Municipal Administration in Pakistan: Elements contributing Towards a Modernization Complex, Proceedings, Problems of Municipal Management (Dacca: National Institute of Public Administration, 1968)

VII. ANNUAL GRANTS TO SUPPLEMENT OCCUPANT'S PAYMENTS

Where will the money for housing come from? Obviously, a clue to the riddle of housing for industrial workers lies in the arrangements for finance. Admitted that capital grants have not been forthcoming from industrialists to build houses at S.I.T.E., is it reasonable to suppose that a centralized program for housing at S.I.T.E. can be financed? In this Chapter we make a very rough estimate of the total annual costs ("rental costs") of housing for an industrial worker's family at S.I.T.E., and subtract from that what we estimate he can pay as rent, or debt service on owned home. Then we analyze the adequacy of payroll charges and revenues from land sales to pay the rest of the costs.

This analysis is very preliminary. "Rules of thumb" are used throughout, and each needs to be checked in detail by an appropriate expert. Since all we have at present are rules of thumb and assumptions, only a very preliminary calculation can be made. Essentially, the purpose is to see if the base-line proposals appear sufficiently feasible to justify the expense of a definitive study. This Chapter concludes that the plan is not financially infeasible. Therefore we recommend that the definitive studies be made.

The basic test of financial feasibility is to calculate the costs, deduct the portion of costs which the occupants can pay, and see if there are sufficient sources of grant funds to make up the difference. The total costs of land and building per household as shown in the accompanying table is estimated at Rs. 6920, of which building costs of Rs. 5,000. To convert this to annual cost of housing, it has been customary in many countries to accept as a rule of thumb that monthly total costs of housing, including real estate taxes, maintenance and operation, as well as debt service, will run 1% of capital costs per month, 12% a year, or Rs. 120 for each 1,000 invested in capital cost.

The accompanying table first shows that the total annual cost would then be Rs. 826 for the typical family at S.I.T.E. If such a family has a wage income of Rs. 1500 (Rs. 125 per month), it could afford not more than Rs. 225 a year for annual housing costs on the assumption that industrial workers at S.I.T.E. can afford the 1590 share of wage income paid by industrial workers in other urban centers of Pakistan.* (This is twice the percentage that is paid by government employees, whose housing presumably represents one half government, half subsidy, one half contribution by the government employee).

*Abdul Aziz Anwar, Working Conditions of Laborers in the Textile Industry, 1964

The gap of Rs. 601 between the annual total cost of housing and what the average worker family can afford must be filled if the project is to be judged feasible. The table shows various ways that the gap might be filled. Using diverse financial devices, each implying explicit or implicit grants in aid. Three basic types of aid are conceivable: capital grants, annual grants, and grants implicit in the terms of loans advanced to the occupants (either on an annual or capital grant basis). We recommend that any capital grant be conditional, and that annual grants and debt service schedules be adjustable so that sources of grants in aid can be husbanded for those most in need of grants (i.e. a policy of terminating grants whenever a household sells its leaseholds or is no longer represented on any industrial payroll, and adjusting term of loan repayment in accord with change in current income).

One type of recommended annual grant is calculated proportional to size of payroll, and would be payable by the industrialist at the time each payroll is made up. A contribution of 2.5% of payroll, added to the industrialist's costs is a conservatively reasonable substitute for the policy of asking the industrialist to make capital grants for housing for some of his workers. (If S.I.T.E. leaseholds are not taxed at the full permissible tax rate, the 2.5% contribution for worker housing could be raised without unusual burden on the industrialists, as we shall explain later).

A contribution of 2.5% on average pay of Rs. 1500 a year would yield Rs. 37.50 a year. This, along with the Rs. 225 assumed affordable by the occupant, reduces the gap to a maximum of about Rs. 563 annually per family household.

A second grant might pay the development cost of the land. We suggested earlier than an ordinary level of real property taxes should pay the full costs of land development at S.I.T.E., especially considering the very large real estate value of the industrial establishments there. If made repayable on sale of the dwelling or on departure of all household members from industrial employment, the bare land value might also be granted free. A better alternative might be to obligate the occupant to pay full debt service on the total value of the land, but to waive payment in all years until such time as the occupant sells the leasehold, or leaves industrial employment.

Parts A, B, and C of the following table refer, respectively, to the gap remaining if the occupant is required to pay back

A. Total Capital Cost, B. Capital Cost of Building and Open Land, or C. Building Only. The entries under the four columns show the calculations and gap remaining under four sample plans of repayment of these capital costs. At the far right is shown the gap remaining if the occupant must repay in 20 years and if he is charged interest at the rate of 5%. The resulting gap of Rs. 604 can be reduced to Rs. 459 if he is permitted to repay over 25 years, and reduced to Rs. 300 if he has 40 years to repay. Of course 40-year repayment terms at 5% would be possible only under a government guarantee of the loan. The left-hand column shows the gap at only Rs. 212 if he has 40 years to repay and is required to pay no interest, but that assumes an additional implicit grant. It seems reasonable to assume that a gap of between Rs. 227 and Rs. 300 annually, based on a 40-year loan with 5% interest is the smallest that can be produced without another source of grant.

This brings us to the potential grant source which is uniquely available in Karachi, the capital gain in land value resulting from growth in population and buying power there. If we assume that the average household purchasing a leasehold for a plot in Karachi acquires 160 square yards (i.e. twice the area proposed on the average for the industrial workers at S.I.T.E.), and if we assume that the difference between the auction price and the cost of developed land is Rs. 12 per square yard, the land-developing agencies stand to gain Rs. 1920 per household by auctioning the land. It is proposed that this source be added to the fund used for annual grants in aid of housing for industrial workers.

It is extremely difficult to estimate just how productive this source would be. The Karachi area is said to be growing by 6% a year, which would imply about 36,000 households a year (about 12 times as many annually as are proposed to be built at S.I.T.E.). Actual construction of houses in Karachi is no doubt much less than 36,000, and even household acquisition of plots does not reach that annual figure. Even at one quarter that rate, however, (or 9,000 a year), if half the capital gains estimated available from auction sales were added to the grand fund for low-rent housing at S.I.T.E. the average contribution to the grant fund would be Rs. 86.4 lakhs (8.64 million). This would pay Rs. 457 annually or enough (per household at S.I.T.E.) to assure payment of twice the gap for houses at S.I.T.E.

If however this grant source is to be available later to finance housing for other families of low income on a continuing

Costs, Ability to Pay, and Grants Required Per Family Household at S.I.T.E.	Rs.				Bldg. Plus Open Land
	Open Land	Land Development	Build-ing	Total	
Capital Cost @315 dwellings per acre (approx.@80 sq.yds.)	1200	720	5000	6920	6200
Conversion Ratio, Capital to Annual Cost @1000/120	140	86	600	826	744
Capacity to Pay for Housing @15% of Rs. 1550 Wages	225	225	225	225	225
Total Annual Housing Grant Required	0	0	375	601	519
Grant from Payroll Charge @2.5%x Wage	38	38	38	38	38
Additional Grant Required	0	0	337	563	481
Annual Costs, Ability to Pay, and Grants Required Per Family Household at S.I.T.E.	Annual Payments, Alternative Loan Repayment Plans, in Rs.				
	40 Yrs. No Interest	40 Yrs. 5% Interest	25 Yrs. 5% Interest	20 Yrs. 5% Interest	
Conversion Rate, Capital to Annual Debt Service	1000/25	1000/38	1000/61	1000/82	
A. Debt Service on Total Capital Cost (Rs. 6920)	175	263	422	567	
Additional Annual Cost	300	300	300	300	
Total Annual Cost	475	563	722	867	
Household Capacity to Pay	225	225	225	225	
Grant from Payroll Charge	38	38	38	38	
Additional Grant Required	212	300	459	604	
B. Debt Service on Bldg. and Open Land (Rs. 6200)	155	236	378	508	
Additional Annual Cost	300	300	300	300	
Total Annual Cost	455	536	678	808	
Household Capacity to Pay	225	225	225	225	
Grant from Payroll Charge	38	38	38	38	
Additional Grant Required	192	273	415	345	
C. Debt Service on Building Only (Rs. 5000)	125	190	301	410	
Additional Annual Cost	300	300	300	300	
Total Annual Cost	425	490	601	710	
Household Capacity to Pay	225	225	225	225	
Additional Grant Required	200	265	376	385	

program that goes beyond that at S.I.T.E., it might be necessary to recapture more than the one-quarter of potential capital gains here assumed. Since we do not know that such recapture rate is assured, we would warn that the grant sources analyzed here might not be sufficient and that grants from the Government of Pakistan might be required for a housing program in the Karachi area that goes much beyond the single large proposed project at S.I.T.E. Much more careful study would be necessary before the size of such grants for additional projects could be estimated. But, in any case, our studies indicate that the financing of the gap for housing at S.I.T.E. does not appear infeasible, if the payroll and auction sales sources can be tapped in the way here proposed. A number of technical issues remain to be considered:

We have assumed that the amount of grant for housing industrial workers would be on a sliding scale inverse with income. There are precedents for this in the housing policies of many countries. Study of these is recommended as part of surveys of financial feasibility.

Financial machinery is desirable permitting home ownership for some of the families. The prospect of home ownership is a key to mobilizing the savings and labor of the occupant family in self-help. Also, many families have an overwhelming aspiration for home ownership and, in anticipation of land allotment programs will refuse rental quarters.

To make the payroll charge administratively feasible for grants in aid of owned homes, payrolls would have to be checked. This would also permit calculation of what payment for housing is due from the worker. Unemployment or illness resulting in loss of wages can be absorbed by extending the period of the loan, i.e. permitting him to forego adding to his equity, or he might even be permitted actually to borrow on his equity; if income increases, he could speed up repayment of the loan.

Preference is assumed for families over households of single persons. While both groups suffer from poor housing conditions, the number of persons living as bachelors is as high as it is partly because (a) they do not establish families or bring them to Karachi because housing is inadequate, (b) the single person is just becoming accustomed to the city, and his low initial income and his fear of believed "evils" of the city have not yet been surmounted. Since,

he will want to establish and bring his family to the city, many persons now living as bachelors are therefore prospective occupants of family housing.

Thus, the single person should be included in the payroll tax plan. He should be permitted to save it by depositing it in the association for savings and home finance. Similarly, families not yet housed under the scheme could save in that way, as deposits until withdrawn by the worker.

Grants from K.D.A. Auction Sales

The proposed charge against net increase from K.D.A. land development income is large, potentially. The basic principle is simple: The value of land in Karachi is far more than the cost of serving it with utilities, and grows as the population and its buying power grows.

This fact is even not utilized by K.D.A. to hold out an opportunity for capital gain and then to encourage purchase of the land which K.D.A. develops, and, hopefully, to encourage housing construction. Thus, if the market price for developed land is Rs. 25 to 40 per square yard, and K.D.A. can get government land for Rs. 3 or 4 per square yard, equip it with streets, sewers, and water supply for another Rs. 7 to 13, it can charge the purchasing "cooperative housing society", or "ballot price" buyer a price of Rs. 13 to 19, and thus offer this knowledgeable buyer the opportunity for a sizeable capital gain.

Before K.D.A. was created, cooperative housing societies attempted to do the whole job themselves and were originally conceived as sharing the whole enterprise. To the extent that people thought about capital gains at that time, the cooperative was thought as a means of sharing that as well, on some basis of equity favoring its needy members. Reportedly it did not always work out so well.

But K.D.A. is becoming a sort of giant cooperative, and is gradually developing the sophisticated pricing policy which can accomplish the old cooperative purpose whether or not cooperatives buy K.D.A.'s newly developed land.

An example of a land pricing policy is offered in the following hypothetical figures for single-family residential development per square yard:

<u>Size of Plot</u>	<u>Total cost to K.D.A.</u>	<u>Price Charged</u>	<u>Market price land after construction</u>
120	13	10 (i.e. loss)	25
190	12	12 (i.e. no loss no profit)	24
290	11	14 (i.e. profit)	23
444	10	16 (i.e. profit)	22
670	9	18 (i.e. profit)	21
1000 up	8	20 (i.e. profit)	20

The revenue from sales of larger size plots above balances the deficit from sales of smaller size plots, the number of the latter being assumed larger than the total number of plots of 290 square yards or more.

Such a price structure if actually in effect would be making three significant redistributions of land values:

- (1) A redistribution favoring smaller plots.
- (2) A redistribution favoring high cost-per-unit plots.
- (3) A redistribution to land purchasers of that formerly free resource.

Since the general trend above (but not necessarily the figures given) probably reflects reality, questions of policy arise:

(1) An efficiency engineer would emphasize the higher costs of more water connections, etc. when the plots are smaller, and thus closer together, and might argue for a change in price policy in order to get a better record of net cost per unit.

(2) Those concerned with low-cost housing would also emphasize the implicit graduated subsidy to smaller plot, but would applaud the correlated low price with lower income of the purchasers.

(3) Those concerned with efficient use of aggregate financial resources would criticize the failure to charge market price in the aggregate (with or without a lower-than-market price for small, and higher-than-market price for large plots).

Essentially, the industrial housing problem calls for an upward shift in the price schedule in the interest of (3) while retaining its "tilt" praised on criterion (2), since only the smallest plots are of any interest at all to the vast majority of

industrial workers.

But the buyers of the largest plots are now paying close to market price (and in the Clifton area, by government requirement, had to bid in the land at auction). Only in the size range occupied by lower-middle and upper-middle income families (200 sq. yds. and up to 1500 sq. yds.) are there enough purchasers that a price rise would yield enough to permit still further reductions in price for buyers of the smallest developed parcels. That would be an effective policy, so far as it goes. But there is speculation in small as well as large plots. The experience suggests that the principle of market pricing of all plots be followed, and the profits applied to low-income housing. This avoids, among other difficulties, the need for regulations and charges intended to assure that the land will be built on for housing before speculation sets in.

How would such a plan work out where home ownership is sought? The two key institutional problems then would be (1) how to coordinate the grants with debt service, and (2) how to put the household in a position to participate successfully in a land auction prior to receipt of the annual grants in aid.

The solution proposed to the first problem is to limit the program at first to industrial workers for whom written payroll records are available, and initially to pay to the housing authority the amount of the pre-selected percent grant based inversely on the amount of wages. The housing authority would then make a record and pay the grant, in the name of the employee, to the financial institution which had loaned to him.

To solve the second key institutional problem the low-income family must be in a position at time of land auction to participate successfully, even though the grants in aid are not proposed to be payable except as monthly (or other periodic) subsidies to reduce the burden of debt service. (While actual K.D.A. sales of land lease may be to intermediaries such as firms "cooperative housing societies" it may be assumed that many of the intermediaries successful in K.D.A. sales will in turn auction). Conceptually, there are two alternatives: (1) to conduct the auction in terms of monthly payments for a fixed term and interest rate, (2) to help the family capitalize promised future subsidies at the time of the auction by lending against the future subsidy.

On public notice of a prospective land auction the institution for savings and home finance could post the amount of loan, the monthly payment and the terms which it was prepared to

allow for each parcel, and would republish the published monthly grant currently available from the housing authority for commitment during all of such term. Armed with this information, families of all income levels could enter the auction on approximately equal terms, each lower level having a larger capitalized grant which he could add to his own cash bid. If the high bidder for some reason would later be disqualified, the next highest qualified bidder could later claim the loan.

In the long run, in Karachi the artificially high price of land, created by the artificial scarcity of permissible building envelope at near-in locations must give way. This process can be hastened somewhat, but the required institutional changes will be ponderous and slow at best. Therefore, the short-term strategy emphasizes "tapping" for social purposes the rises in land value rather than reduction of land prices. Of course, in the long run the blockages must be dissolved which now insulate central Karachi land from market forces, freeze the metropolis profile at low level, crystallize the Victorian origins of the town, and force upon the people of Karachi incredibly long commuting journeys, plus either high utility costs or no utility service.

Under K.D.A.'s management, the funds for the administration of resettlement areas come from the central government to augment revenues from monthly rent and purchase payments. We have not explored the amount of traditious respecting such payment, all of which would of course become relevant if a decision is made that a housing authority with jurisdiction larger than the S.I.T.E. area is desirable.

K.D.A. HOUSING PROJECTS

Displaced Persons Colonies

There are 6 D.P. Colonies with a total of 50,000 Dwelling units, developed originally by the Karachi Improvement Trust for refugees and now under the jurisdiction of K.D.A. (For further details see Exhibit B).

Greater Karachi Resettlement Program

One story houses for low income squatter families on individual plots.

Korangi - 26,000 one and two room dwelling units (120-128 sq.yd. plots)
N. Karachi - 18,600 one room dwelling units (112 sq.yd. plots)
(For further details see Exhibit B).

Plot Township Schemes

Development of plot townships at Aurangi, Baldia and Qasba to provide more than 42,000 plots of 80 sq.yds. for Juggi (shacks) dwellers. Due to low development standards, including only levelling of land and demarcation of plots, a plot will be sold for Rs. 240.

Multi-Story Flats - Demonstration Project

Two - 5 story buildings.

Self-Help Project

Ten (21'x50') sold to Telephone and Telegraph Cooperative Housing Society. Ten four room houses now under construction by low-income employees.

Town Planning Schemes

Scheme No. 1, Drigh Road

Area - 340 acres, 447 plots (600-2000 sq. yds.), population - 9,000. Two neighborhood units. Each house will front on a 40' wide road, 6 ft. wide footpaths on both sides for pedestrians. It is now under the jurisdiction of the Karachi Municipal Corporation.

Scheme No. 2, North Nazimabad

Area - 3,000 acres, 11,487 plots (200-3000 sq.yds.) population - 126,000. In addition to the allotment of plots to individuals, fourteen housing societies and a private trust have been allotted land for the construction of houses. The K.D.A. has built 160 - 2-room flats in the area.

Scheme No. 5, Clifton (Kahkashan)

Area - 1,700 acres, 1840 plots (600-6,000 sq.yds.), population - 78,000. This scheme, including a 100 acre seaside park, will accommodate high income families.

Scheme No. 7, Jail-Drigh Road (Blocks IV & V)

Area - 360 acres, 500 plots (200-1200 sq.yds.), population - 5,000. Four private housing societies - Dawood, Isquat Town, Alihilal and Kutchi Menon have been allotted plots in this scheme. The Scheme has been turned over to K.M.C.

Scheme No. 16, Federal "B" Area (Mansura)

Area - 2900 acres, 22,400 plots (120-1000 sq.yds.), population - 150,000. There are 19 neighborhood units, three for upper income groups, seven for mixed income groups and the remaining nine are for lower income groups. About 289 industrial concerns and 100 housing societies have been allotted plots, in addition to individuals, trusts and construction companies. K.D.A. has constructed 1,000 two-room single story units on plots of 120 sq.yds. and offered to the public.

Scheme No. 19, Khudadad Colony

Area - 43 acres, 440 plots (various sizes), population - 3,000. A redevelopment scheme of the Khudadad Colony, based on Patrick Geddes principle. It provides for construction of roads, footpaths, installation of water supply and sewerage lines.

Scheme No. 18, Bohri Bazar

Renewal of central commercial area. K.D.A. has constructed 77 new shops and 88 flats.

EXHIBIT B

K.D.A.

HOUSING PROJECT DATA SHEET (Displaced Persons Colony)

1. Name of Project : Drigh Road Township
2. Location : One right bank of Malir River about 1 mile S/W Airport
3. Total number of Dwelling Units : 4771
4. Total Cost of Project : 1.16 crore
5. Total Area of Project : 611 Acres
6. Owner : KDA on behalf of Government
7. Contractor : Houses built through contract
8. Developed By : Pak P.W.D.
9. Financed By : Ministry of Rehabilitation & Works
10. Average Time to complete one dwelling unit : 6 months to one year
11. Building Materials : Cement Concrete, with RCC roof
12. Number of Storys : One only
13. (a) Dwelling Unit type : ---

Type	Total No.	Plot Size	No.Rms/Sq.Ft.	Income	Rent	Utilities
A (a)	3768	90 sq.yds.	1 room(10x10 ⁰)	Rs.100/-	5/-	Water supply through
(b)	634	80 sq.yds.	1 room(10x10 ⁰)	Rs.100/-	5/-	community tap, no
(c)	360	80 sq.yds	1 room(10x10 ⁰)	Rs.100/-	5/-	sewerage and no electricity

14. Total Development Cost per Dwelling Unit (for each type):
 - Site Acquisition Cost
 - Site Improvement Cost
 - Dwelling Unit Construction Cost
 - Planning Costs
 - Other Costs
 - Total cost per dwelling unit: (a) Rs. 1200/- only (with kitchen bath- & one room
 - (b) Rs. 780/-only (with only 4 rooms)
 - (c) Rs. 780/-only (no compound wall)
15. Number of years in operation : 14 years.

K.D.A.
HOUSING PROJECT DATA SHEET
(Displaced Persons Colony)

1. Name of Project : Malir Extension
2. Location : Right bank of River Thadde adjacent to Malir Colony
3. Total Number of Dwelling Units : 7568
4. Total Cost of Project : 1.84 Crore Rupees
5. Total Area of Project : 740 Acres
6. Owner : KDA on behalf of Government
7. Contractor : Houses built through contracts
8. Developed By : Pak P.W.D.
9. Financed By : Ministry of Rehabilitation & Works
10. Average Time to complete one Dwelling Unit : 8 months to one year
11. Building Materials : Cement Concrete with RCC roof
12. Number of Storys : Single
13. (a) Dwelling Unit Types : ---

<u>Types</u>	<u>Total No.</u>	<u>Plot Size</u>	<u>No.Rms/Sq.Ft.</u>	<u>Income</u>	<u>Rent</u>	<u>Utilities</u>
	7568	80 Sq.yds.	1 Room(10x12 ⁰)	Rs.100/-	8/-	Water supply through community tap, no electricity and sewerage

14. Total Development Cost per Dwelling Unit (for each type):
 - Site Acquisition Cost
 - Site Improvement Cost
 - Dwelling Unit Construction Cost
 - Planning Costs
 - Other Costs
 - Total cost per Dwelling Unit: Rs. 1920/-only
15. No. of years of operation : 14 years

K.D.A.
HOUSING PROJECT DATA SHEET
(Displaced Persons Colony)

1. Name of Project : Malir Township
2. Location : Right bank of River Thadde parallel to the Malir Cant. Malir halt Rly line about one mile east of Malir halt
3. Total Number of Dwelling Units : 7162
4. Total Cost of Project : 1.23 Crores Rupees
5. Total Area of Project : 660 Acres
6. Owner : KDA on behalf of Government
7. Contractor : Houses built through contracts
8. Developed By : Pak P.W.D.
9. Financed By : Ministry of Rehabilitation & Works
10. Average Time to Complete one Dwelling Unit : 6 months to one year
11. Building Materials : Cement concrete, RCC roof
12. Number of Storys : Single
- 13.(a) Dwelling Unit Types : 7162

<u>Type</u>	<u>Total No.</u>	<u>Plot Size</u>	<u>No.Rms/Sq.Ft.</u>	<u>Income</u>	<u>Rent</u>	<u>Utilities</u>
A	7162	80 Sq.yds.	1 room (10x12')	Rs.100/-	5/-	Water supply through community tap, no sewerage and no electricity

14. Total Developed Cost per Dwelling Unit (for each type):
 - Site Acquisition Cost
 - Site Improvement Cost
 - Dwelling Unit Construction Cost
 - Planning Costs
 - Other Costs

Total Cost per Dwelling Unit: Rs. 1200/- only
15. Number of years in operation : 15 years

K.D.A.
HOUSING PROJECT DATA SHEET
(Displaced Persons Colony)

1. Name of Project : Landhi
2. Location : On the left bank of Malir River about 16 miles s/e of Karachi Central.
3. Total Number of Dwelling Units : 10,347
4. Total Cost of Project : 1.53 Crore Rupees
5. Total Area of Project : 740 Acres
6. Owner : KDA on behalf of Government
7. Contractor : Houses built through contracts
8. Developed By : Pak P.W.D.
9. Financed By : Ministry of Rehabilitation & Works
10. Average Time to Complete one Dwelling Unit : 6 months to one year
11. Building Materials : Cement concrete, RCC roof
12. Number of Storys : Single
- 13.(a) Dwelling Unit Types : ---

<u>Types</u>	<u>Total No.</u>	<u>Plot Size</u>	<u>No.Rms/Sq.Ft.</u>	<u>Income</u>	<u>Rent</u>	<u>Utilities</u>
A	10547	80 Sq.yds.	1 Room(10x12')	Rs.100/-	5/-	Water supply through community tap, no sewerage and no electricity

14. Total Development Cost per Dwelling Unit (for each type):
 - Site Acquisition Cost
 - Site Improvement Cost
 - Dwelling Unit Construction Cost
 - Planning Costs
 - Other Costs
 - Total Cost per Dwelling Unit: Rs. 1200/-Each
15. Number of years in operation : 12 years

K.D.A.
HOUSING PROJECT DATA SHEET
(Great Karachi Resettlement Program)

1. Name of Project : Korangi Township
2. Location : On the left bank of Malir River in the South of Landhi
3. Total Number of Dwelling Units : 25,784
4. Total Cost of Project : Originally estimated Rs. 95 Crores, rev. 49.50 Crore for both Korangi & North Karachi
5. Total Area of Project : 40 Sq. Miles
6. Owner : KDA on behalf of Government
7. Contractor : Houses built through contracts
8. Developed By : K.D.A.
9. Financed By : Ministry of Rehabilitation
10. Average Time to complete a Dwelling Unit : 6 months
11. Building Materials : Cement concrete, RCC roof & AC sheer roof
12. Number of Storys : One only
- 13.(a) Dwelling Unit Types : ---

Type	Total No.	Plot Size	No.Rms/Sq.Ft.	Income	Rent	Utilities
A	14094	120 Sq.Yds.	1 Room(10x12')	Rs.100/-	Rs.8/-	Water supply and
B	11178	128 Sq.Yds.	1.5 Room(10x12')			sewerage - no
			(8x10')	Rs.100/-	Rs.15.30	electricity
C	512	128 Sq.Yds.	2 Rooms (10x12')	Rs.200-306	Rs.36/1-	(for all 3)

14. Total Development Cost per Dwelling Unit (for each type):
 - Site Acquisition Cost
 - Site Improvement Cost
 - Dwelling Unit Construction Cost
 - Planning Costs
 - Other Costs

A Type	Rs. 1909/-
B Type	Rs. 3498/-
C Type	Rs. 5800/-

15. Number of years in operation : 9 years

K.D.A.
HOUSING PROJECT DATA SHEET
(Displaced Persons Colony)

1. Name of Project : Liaquatabad
2. Location : Situated along Tin Hutti North Karachi on the right bank of river Lyari
3. Total Number of Dwelling Units : 7530
4. Total Cost of Project : 83,21,620/-
5. Total Area of Project : 662 Acres
6. Owner : KDA on behalf of Government
7. Contractor : Houses built through contracts
8. Developed By : Pak P.W.D.
9. Financed By : Ministry of Rehabilitation & Works
10. Average Time to complete one Dwelling Unit : 6 months to one year
11. Building Materials : Cement concrete, aluminum sheets
12. Number of Storys : Single
- 13(a) Dwelling Unit Types : ---

<u>Type</u>	<u>Total No.</u>	<u>Plot Size</u>	<u>No.Rms/Sq.Ft.</u>	<u>Income</u>	<u>Rent</u>	<u>Utilities</u>
A	7530	80 Sq.Yds.	1 Room(10x12 ^o)	Rs.100/-	5/-	Water through community tap, no sewerage and no electricity

14. Total Development Cost per Dwelling Unit (for each type):
- Site Acquisition Cost
- Site Improvement Cost
- Dwelling Unit Construction Costs
- Planning Costs
- Other Costs
- Total cost per Dwelling Unit: Rs. 720.00 Only
15. Number of years in operation : 17 years

K.D.A.
HOUSING PROJECT DATA SHEET
(Displaced Persons Colony)

1. Name of Project : Aurangabad
2. Location : Situated along Granginala, adjacent to S.I.T.E. in close proximity to N/abad
3. Total Number of Dwelling Units : 3,000
4. Total Cost of Project : 60,00,000 Rupees
5. Total Area of Project : 175 Acres
6. Owner : KDA on behalf of Government
7. Contractor : Houses built through contracts
8. Developed By : Pak P.W.D.
9. Financed By : Ministry of Rehabilitation & Works
10. Average Time to complete one Dwelling Unit : 6 months to one year
11. Building Materials : Cement concrete
12. Number of Storys : Single
- 13.(a) Dwelling Unit types : ---

<u>Type</u>	<u>Total No.</u>	<u>Plot Size</u>	<u>No.Rms/Sq.Ft.</u>	<u>Income</u>	<u>Rent</u>	<u>Utilities</u>
A	3000	40 Sq.Yds.	1 Room (10x10')	100/-	14.50	Water supply through community tap, no sewerage, no electricity

14. Total Development Cost per Dwelling Unit (for each type):
 - Site Acquisition
 - Site Improvement
 - Dwelling Unit Construction Cost
 - Planning Costs
 - Other Costs
 - Total Cost per Dwelling Unit: Rs. 2088/- only
15. Number of years in operation : 14 years

K.D.A.
HOUSING PROJECT DATA SHEET
(Greater Karachi Resettlement Project)

1. Name of Project : North Karachi
2. Location : Situated about 12 miles in the North of Karachi Central and about 3 miles in the north of North Nazimabad
3. Total number of Dwelling Units : 18,562
4. Total Cost of Project : 49.50 Crore Rupees (for North Karachi and Korangi)
5. Total Area of Project : 9 Sq. Miles
6. Owner : KDA on behalf of Government
7. Contractor : Houses built through contracts
8. Developed By : K.D.A.
9. Financed By : Ministry of Rehabilitation & Works
10. Average time to complete one Dwelling Unit : 6 months to one year
11. Building Materials : Cement concrete, A.C. sheet roof
12. Number of Storeys : Single
- 13.(a) Dwelling Unit Types : ---

<u>Type</u>	<u>Total No.</u>	<u>Plot Size</u>	<u>No.Rms/Sq.Ft.</u>	<u>Income</u>	<u>Rent</u>	<u>Utilities</u>
A	18562	128 Sq.Yds.	1.5 room(10x12' (8x8')	Rs.120/-	15.30	Water supply through community tap, sewerage and no electricity

14. Total Development Cost per Dwelling Unit (for each type):
- Site Acquisition Cost
 - Site Improvement
 - Dwelling Unit Construction Cost
 - Planning Costs
 - Other Costs
- Total Cost per Dwelling Unit: Rs. 3498/-only
15. Number of years in operation : 7 years

EXHIBIT C

STAR TEXTILE MILLS WORKERS COLONY:

S.I.T.E.

CONSTRUCTION COST

Total area of Labour Colony: 11.5 acres
Present structures: - 210 Two-room family quarters

Area of each Plot 29' 3" x 21' 6"

Total square feet 620 or 69 square yards

Built up area 358 sq. ft. or 40 sq. yds.

Total approximate cost per family quarter as below:-

a) Building material and labour charges	Rs. 3153.00
b) Plumbing & Sanitary (Material & labour)	Rs. 363.00
c) Gas pipes burners and fitting	Rs. 140.00
d) Electric light (material & labour)	Rs. <u>112.00</u>
Sub-total	Rs. 3768.00
e) Compound wall, under-ground water tank, pump house and motor rooms etc. per quarter	Rs. 205.00
f) Architects fee & Supervisor charges approximately per quarter	Rs. <u>150.00</u>
	<u>Rs. 4123.00</u>

Sept. 25, 1961

DATA SHEET
S.I.T.E.

Total Area	- - - - -	4,000 Acres
Industry	- - - - -	1,600 Acres
Housing	- - - - -	630 Acres

TRADEWISE DISTRIBUTION OF FACTORIES:

No. of Factories in production	- - - - -	595
No. of Factories under construction	- - -	33
No. of Factories coming up	- - - - -	<u>13</u>
	Total	641
Textiles	- - - - -	75
Allied Textiles	- - - - -	110
Oil & Soap	- - - - -	25
Silk	- - - - -	30
Food Stuff	- - - - -	20
Chemicals	- - - - -	61
Engineering	- - - - -	150
Plastic	- - - - -	20
Misc.	- - - - -	125
Chemicals	- - - - -	<u>25</u>
	Total	<u>641</u>

LABOUR COLONY NO. 1

Area Allotted	- - - - -	11.75 Acres)	
Area available for allotment	- - - - -	128.25 ")	-- 140
Area under amenities	- - - - -	19.00 "	
Area under roads	- - - - -	48.00 "	
Area under nullahs, etc.	- - - - -	<u>13.00 "</u>	
	Total	<u>220.00 Acres</u>	

LABOUR COLONY NO. 2

Area Allotted	- - - - -	147.00 Acres
Area available for allotment	- - - - -	82.00 "
Under Housing Scheme	- - - - -	21.36 "
School	- - - - -	16.00 "
Mosque	- - - - -	2.50 "
Parks	- - - - -	6.50 "
Dispensary	- - - - -	1.00 "
Hills and Nullahs	- - - - -	73.00 "
Roads	- - - - -	<u>60.64 "</u>
	Total	<u>410.00 Acres</u>

Total Area	- - - - -	410.00 Acres
Net Area for allotment	- - - - -	256.36 "
Area Allotted	- - - - -	147.00 "
No. of Tennants	- - - - -	61
No. of Plots (constructed)		9
Area now available for allotment	- - - - -	103.36 Acres

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CALENDAR OF WORKERS' HOUSING TEAM

Oct. 4 Washington: Briefing at Department of Housing and Urban
Developmand and at US/AID
Departure

Oct. 5 Arrival Istanbul Rest Stop

Oct. 6 Departure Istanbul

Oct. 7 Arrival Karachi, Tour of Korangi

Oct. 8 Departure for Lahore

Oct. 9 Lahore: US/AID
Lahore Improvement Trust
Officials of W. Pakistan Province

Oct. 10 Lahore: US/AID, Director's Luncheon
Field Trip, Lahore Township
Depart for; Arrive Rawalpindi

Oct. 11 Rawalpindi: G.O.P. Planning Commission
G.O.P. Finance Ministry

Oct. 12 Islamabad: Capital Development Authority
Tour of Islamabad and
CDA Testing Labs
Depart for; Arrive Karachi

Oct. 13 Karachi: Karachi Development Authority

Oct. 14 Karachi: KDA

Oct. 15 " Document Review

Oct. 16 " KDA and tour Golimar, Nazimabad, Taimuria,
N. Karachi, Mansuria (16), Liaquatabad (2)

Oct. 17 " KDA and tour Landhi, Malir, Drigh Road

Oct. 18 " KDA and tour Al-Azam, Ismaily Projects (Al Azam
Luncheon), Attend Playland Opening

Oct. 19 " KDA and tour Hussain-D'Silva Projects, Tour S.I.T.E.,
Meet Management Committee

Oct. 20 Karachi: D.W. Building Materials Manufacturers: EMI State Bank
To
Rawalpindi: G.D., Progress Report to US/AID

Oct. 21 Karachi: D.W. and E.M. Calculate Illustrative Project Costs
Peshawar: G.D. to Academy for Rural Development,
University of Peshawar and Regional Planning Project,
Peshawar Valley

Oct. 22 Karachi & Rawalpindi

Oct. 23 Karachi & Rawalpindi DW to PCSIR, CARE, Tour of telephone
Self-Help Project
Rawalpindi GD to Labour Department and Planning
Commission. To Karachi

Oct. 24 Karachi: Writing; Tour S.I.T.E. with Director US/AID, KDA

Oct. 25 Karachi: Writing, Documents

Oct. 26 Karachi: Writing, Documents

Oct. 27 Karachi: Writing, Documents

Oct. 28 Karachi: Writing, Documents

Oct. 29 Karachi: Writing, Documents

Oct. 30 Karachi: Karachi Office, Provincial Labour Department
Architects Society Dinner

Oct. 31 Karachi: Pakistan-American Cultural Group
Landhi I.T.E.; Pakistan Trade Union Council

Nov. 1 Karachi: Progress Reports US/AID
NIPA; Lunch US/AID, Dinner KDA

Nov. 2 Departure: Lahore: Writing, editing

Nov. 3 Lahore: Progress Report US/AID, Typing report to Capital
Loan Committee US/AID Writing, editing

Nov. 4 Lahore: Writing, editing

Nov. 5 Lahore: Writing, editing

Nov. 6 Lahore; to Islamabad: Finance Ministry, Planning Commission
to Karachi and depart (EM & DW)

Nov. 7 Lahore: (60) Editing

Nov. 8 Lahore: W. Pakistan Province officials
Departure for Dacca

Nov. 9 Dacca

Nov. 10 Dacca

Nov. 11 Dacca

Nov. 12 Depart (GD)

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