AGA KHAN RURAL HABITAT-DEVELOPMENT PROGRAM

CONCEPT AND PROGRAM DEVELOPMENT PAPER

Prepared by

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I. BACKGROUND

The Ismailia Central Housing Board, Bombay, on the recommendations of His Highness, the Aga Khan, seeks to start a program in rural habitat-development.[1] This paper sets out the concepts, objectives and components of the program, and describes the steps required to prepare and implement it. The paper has been prepared by this writer in detailed discussion with the Housing Board, especially its chairman, Mr. Habib Thariani, the member in charge of the program, Mr. Naser Manji, and Mr. Aseem Inam, the Board's rural architect assigned to plan and implement the program.[2]

II. PROGRAM CONCEPT AND OBJECTIVES

The three key concepts of the program are as follows:

1. Physical improvements are seen as a means of contributing significantly to the broader socio-economical objectives of rural

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1 The physical habitat consists of buildings (residential, farm commercial, production and community facilities, etc.) and small-scale agricultural and settlement infrastructure (roads and pavements, small irrigation channels, dams and culverts, water supply drainage, waste disposal, electricity, etc.).

2 This paper is a result of an assignment undertaken by this writer to assist the Housing Board to develop a program to improve the rural habitat in Gujerat , India.

development. For example: the construction of farm to market roads can stimulate production; the use of local labour and materials in construction can help reduce costs and generate rural employment and incomes; improved design of kitchen and toilet facilities, grain storage and animal areas in the house can improve both health and productivity; demonstrations of how timber can be used functionally and cost effectively in housing can stimulate a market for timber and revitalize the rural timber industry.

2. The indigenous knowledge base of the community is recognized to be a major resource on which to develop appropriate solutions to rural habitat problems. The program must work with the indigenous expertise as represented among community groups, and key persons such as local builders, and building materials entrepreneurs.

3. The program seeks to <u>demonstrate</u> how to improve the rural habitat, and help create the socio-economic, financial and organizational structures required to enable the rural community to implement these improvements in a self-reliant way. The program does not seek to assume responsibility for improving the rural habitat on an ongoing basis.

III. PROGRAM STRATEGY AND COMPONENTS

To achieve the above objectives the program must take into account two basic factors:

First, the interdependence of technical, organizational, managerial and resource/financial aspects. The success of habitat programs depends on whether they are a) technologically appropriate (i.e., the technologies produce significantly more benefits than existing

practice in an affordable and socially acceptable way), b) there is the organizational/managerial capacity and c) adequate resources (financial and material) to design, plan for and implement the improvements on an ongoing basis.

Second, the interdependence between buildings and infrastructure and the construction industry in general, i.e., the influence of the industry, in this case rural construction labour, skills, and materials production and distribution, on the design and technology of buildings and infrasture and vice versa.

Too often habitat projects fail or have limited impact because they focus exclusively on the technology of buildings and infrastructure.

The components of the project and their specific objectives are thus as follows:

1. Organizations/Management: Strengthen the capacity of the organizations involved to plan and implement rural habitat improvement programs. This will include improvements in human resources through training, and in the management of these resources.

2. Building, Building Elements and Infrastructure Improvements: Develop, test and demonstrate more functional, cost-effective, and socially acceptable rural buildings and infrastructure, than suggested by current practice.

3. Rural Construction Industry (builders, contractors and materials industries): Develop, test, and demonstrate ways of

improving construction and materials production skills, and produce and distribute materials that are affordable to the rural poor.

4. Resource Generation and Cost-Recovery: Find ways to generate material and financial resources in the community to implement habitat improvements and augment these with financial mechanisms such as savings and loans schemes, housing and small industries credit, and cross-subsidies.

The program components and how they are to be developed is further detailed in Section V.

IV. PROGRAM DEVELOPMENT

Program development will proceed through three phases:

Phase One: Program Preparation (1 year)

Needs assessment conducted with local community organizations. Design of the program and its four components based on the needs assessment and tested for its feasibility against organizational, technical and resource/financial criteria. Tests may include construction of buildings infractructure and materials industry prototypes, and pilot training workshops. Preparation of the organizational, technical and resource/financial prerequisites for implementing Phase II of the project.

A Block/Taluka may be selected as a pilot area (see map and Table 2 for potential sites).

Phase Two: Program Implementation (3 years)

Based on preliminary testing and demonstration of feasibility conducted in Phase One, this Phase Two will implement the program

over the pilot area, in collaboration with local community organizations. Drawing on this experience it will then design for the expansion of the program to be implemented over several Talukas in Phase Three.

Phase Three

Program implementation of rural habitat davelopment as an ongoing activity over several Talukas.

Each phase will design and prepare for the next. This document will therefore focus on Phase One.

V. PHASE ONE: PROGRAM PREPARATION (1 YEAR) (see Table 1 for schedule of this phase)

The objective of this phase is to work with the community to assess their habitat needs and develop feasible methods for meeting these needs. To do so the project will perform the following tasks in sequence in the time indicated:[1]

1. Prepare program proposal (May - August 1987)

This consists of two stages. First, preparation of the concept document which is this present paper. Second, preparation of the detailed Phase One proposal. This latter document will define in greater detail the program, its components, its organizational structure, management, progress monitoring and evaluation system, resources required (materials and equipment, personnel with terms

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[1] Timings are only indicative of the duration each stage should take and will have to be reassessed when the detailed proposal is prepared.

of references for their hiring, potential sources for obtaining them, and detailed budget), and expected outputs (technology tests, small demonstration projects, reports and drawings, training, etc.).

2. Obtain approval and funding (June - September 1987)

This will require examination of and discussion and agreement on, first, the concept paper and next, the detailed proposal document between the Housing Board, Bombay and the Housing Section of Aga Khan Secretariat, Aiglemont.

3. Mobilize resources (September - October 1987)

This involves obtaining adequate office space, equipment, and personnel identified as necessary in the proposal document. The procedure may begin earlier if adequate agreement in principle is reached on how to proceed with the project. Firm commitments (to staff for example) will however have to follow firm commitments on funding.

4. Select pilot area (October - November 1987)

This involves getting to know potential Talukas, villages and their residents adequately to judge which among them would be most suitable as a pilot area for Phase One and Phase Two. A Taluka and up to three villages in it of varying populations (say 500, 2500, 5000) may be selected to offer a comparison or alternatives if some prove unsuitable.

The selection criteria suggested are: a) that residents are receptive to outsiders working with them to improve their physical environment, b) there is at least potentially, a strong, receptive,

and representative local leadership/organization, c) Muslim including, Ismaili, and Hindu communities are represented in addition to possibly others, and these communities live in relative harmony, and d) the sites are easy to get to and visible for ease of logistics and maximum demonstration effect.

To help achieve the non-communal objectives of the program the project team must present itself and be perceived as a non-communal group and work through non-communal village organizations.

From work done to date villages in the Junagadh block appear to be suitable. A more careful examination of this and other villages by the project team are required to confirm the sites.

5. Survey pilot area (November 1987)

This involves two things: One, establishing a rapport with the residents of the selected areas; two, working with the community to identify those characteristics of the areas and their residents that would be the basis for project design common to all four of the components. These characteristics include basic physical conditions, organizational and social groupings, income and employment conditions, needs and their ranking, and the local resources potentially available to meet needs.

6. Prepare components (December 1987 - May 1988)

At this stage each of the components are prepared in detail as follows:

6.1 Organizational Structure

The organizational structure for implementing the project is established. The roles of the main organizations involved in the project, their strengths, weaknesses, and linkages are identified. Measures are identified for strengthening these organizations and streamlining how they will work together. (For example, what will be the respective roles of the project team and the 'sarpanchayat' - village council - in designing and implementing the project? How, if at all, will the local government agencies be involved? Does the project need to help organize and train local youths to act as a technical arm for the sarpanchayat, etc.)

6.2 Buildings, Building Elements and Infrastructure

The building, building elements and infrastructure needs are identified, prioritized and designed. The priority could be one or some mix of these three areas of physical improvements. Physical improvements could include: improvements to the construction technology of a typical house; design improvements such as to windows for light and ventilation to kitchen areas (including smokeless and fuel-efficient stoves) and grain storage and animal areas; lower cost ways of providing water, street paving, and drainage; or some combination of all of the above (see photographs). Existing methods need to be examined, priority areas for improvement identified, improvements designed, tested and costed, perhaps by constructing prototypes. The tasks should be undertaken with community members, especially the potential users, and local builders and contractors - the last two as part of the design team.

6.3 Construction Industry: Builders, Contractors and Materials Industry

The rural construction industry, the system of providing labour, builders and contractors, and producing and distributing materials for the physical improvements discussed above, is examined to determine whether more cost-effective and income, employment generating methods can be developed for this industry (see photographs for examples). The linkages between introducing an improved construction technology and the production system that will provide the materials for that technology are established and exploited. Again, local builders, materials production entrepreneurs, etc. are recruited as part of the project team to ensure that the indigenous knowledge base is fully utilized. Small prototypes, say of improved brick and lime kilns, may be constructed to test proposed improvements.

6.4 Resource Generation and Cost Recovery

The resources required to implement the proposed physical improvements and ways in which these resources can be generated and recovered are identified. In some cases if improvements are low-cost enough (as in simple modifications to a house) the beneficiary may be expected to use his own resources as is. In most cases other resource generating mechanisms will have to be designed and tapped such as collective self-help (donating voluntary labour and materials), building materials banks, savings and loans schemes, housing and small industries credit, cross-subsidies between profit bearing and non-profit schemes, user charges, or government, NGO and international agency matching grants.

The overall objective must be to design resource generation and cost-recovery mechanisms to ensure that the improvements suggested can be made self-financing wherever appropriate and therefore be implementable on an ongoing basis.

7. Produce Phase Two Documents (May - June 1988)

By the end of the above stage a three year action plan for Phase Two should have been established for each of the components. This plan would detail what actions are worth taking and feasible in improving the built environment and the construction industry in the pilot area. The plan would also specify the organizational framework within which these actions would be taken, the resources (material and financial) required and how they would be generated and recovered. The plan would be based on the work - feasibility studies, tests and demonstrations - conducted in Phase One. Above all, it would have been developed with the community and have their broad agreement.

All this would be documented and presented in a form that would serve two purposes. One, it would be a working document including such things as construction drawings, detailed cost estimates, staffing, scheduling, and work plans of the organizations involved, and loan and repayment procedures. Two, it would effectively communicate what is to be done and why to both the community and others whose agreement and participation may be necessary such as the government agencies and external donors.

On the basis of work conducted in Phase One and this resulting document, approval for Phase Two can be obtained and resources mobilized during the June - September 1988 monsoon period. Phase Two may begin in September 1988.

VI. RESOURCES REQUIRED

The resources required would include personnel, office space, vehicles and equipment, and a budget for the above, for daily operations, for training workshops, and for construction of prototype buildings, infrastructure and materials industries. The details of these should be worked out once this concept paper has been approved. Especially important will be the drafting of careful terms of references for the project team and ensuring that the right people are recruited. Here we shall focus on the personnel requirements and especially on the core project team.

1.0 Personnel

Paid personnel required are at four levels:

1. The core project team of full-time local professionals.
2. A counterpart community group representing the villages involved and expertise in these villages such as in building construction and materials production. These may be part-time.
3. Technical and administrative support such as draftsmen and typists.
4. Foreign or local consultants to provide occasional guidance or technical back-up.

The extent of consultant involvement will be directly inverse to the strength of the local project team.

2.0 Core Project Team

A small but highly motivated and competent local project team with adequate support at the policy and decision-making levels is essential to the success of the project. Among themselves the team should represent the following expertise:

1. Organizational and management experience in running rural development projects and in working with local community organizations, NGO's, and government agencies. Strong interpersonal communication skills with the ability to pursuade and motivate, and working knowledge of Gujerati.
2. Expertise in resource generation and financial management: financial analysis, budgeting, accounting and marketing of rural construction and materials production projects, and with savings and loan schemes, and cost-recovery mechanisms such as user charges or cross-subsidies.
3. Expertise in the design and technological aspects of rural settlement, buildings, infrastructure, and materials production processes.

The project team should consist of three to four professionals representing the above expertise. It is most important that the design and technology expertise is balanced with experience in project management including financial analysis and management, and working with community groups.

3.0 Consultants

Consultants would be best utilized for brief periods at the start, middle and end of Phase One (see Table 1 for indicative scheduling of consultant support). One consultant may be charged with the overall

guidance, monitoring and evaluation of this Phase. The extent of consultant support and mix of local and foreign consultants cannot be established at this early stage. As mentioned, it will be dependent on the strength and make-up of the local team. In general it is more effective in cost and output terms to commit resources to a strong local project team with strong local consultant back-up so that foreign consultant involvement can be minimized.

However if adequate local expertise is unavailable, investment in good foreign consultants is worthwhile provided that technology transfer and training of local counterparts is written into the consultants' terms of reference and that consultants are held accountable for performing this task. Acceptance of a weak local team to save on costs is a false economy since the resulting project may not have been worth the investment.

VII. THE NEXT STEP

This concept document should be reviewed by the Housing Board and the Housing Department of the Aga Khan Secretariat. If this document is approved, the detailed Phase One document should be prepared.

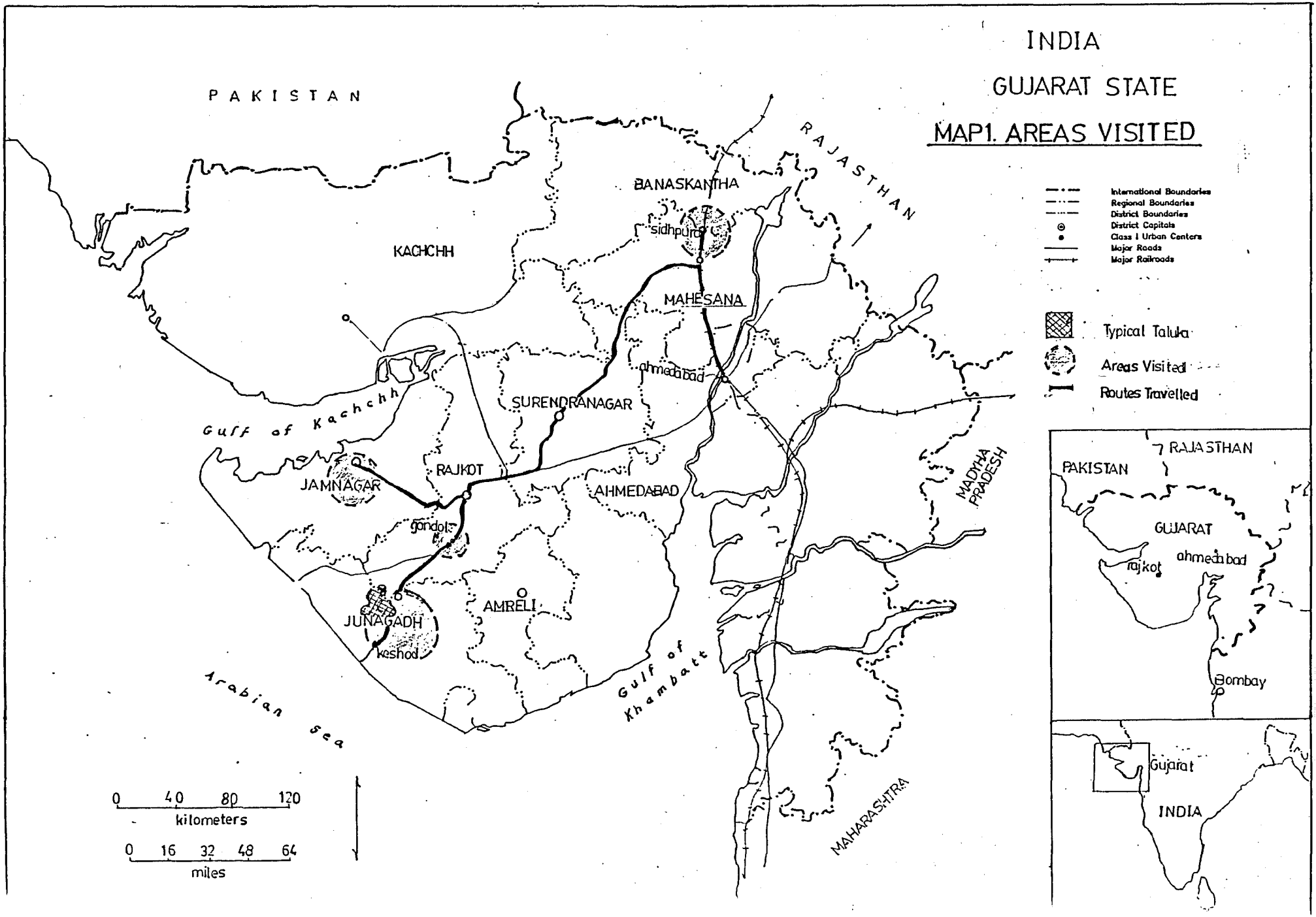
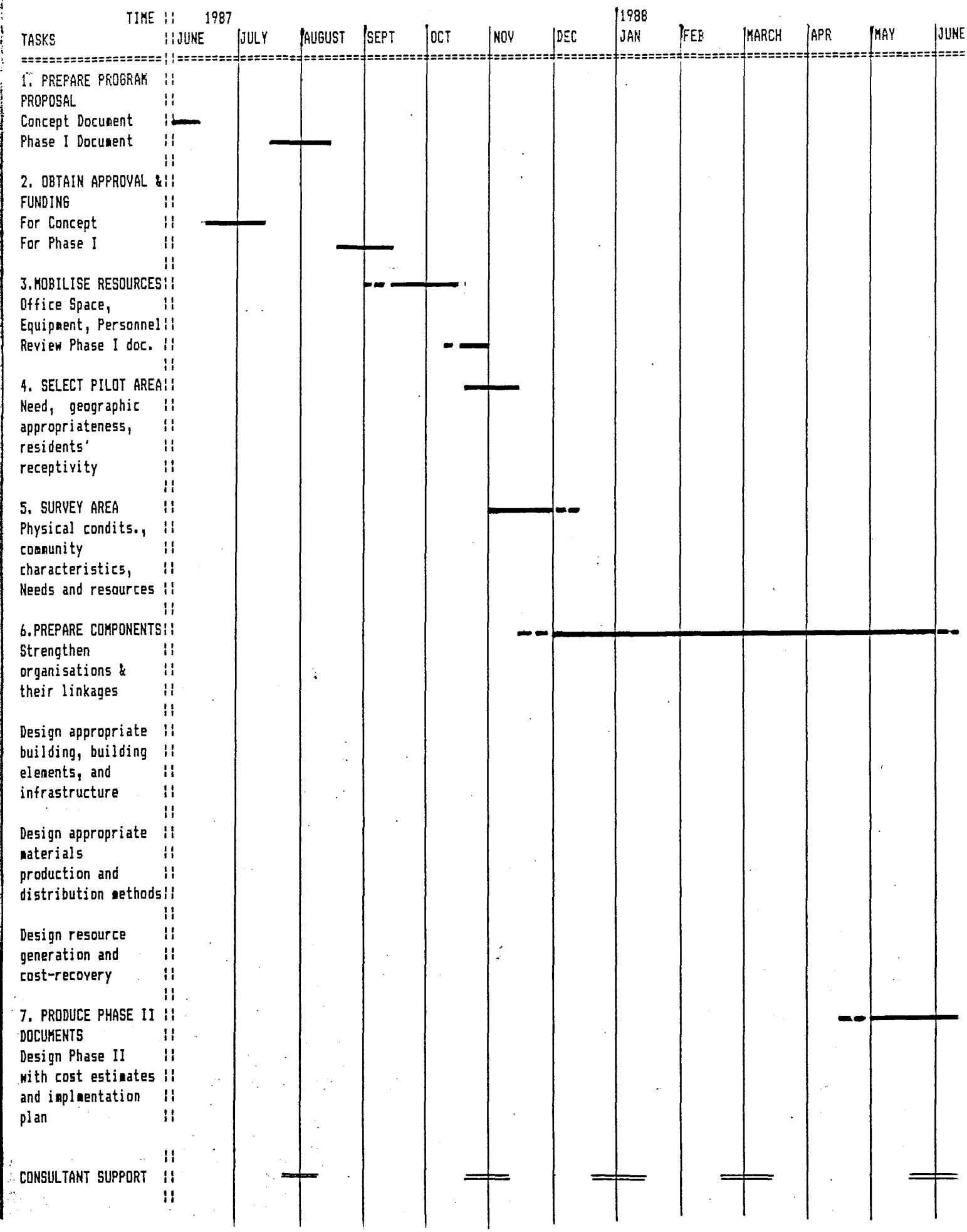

INDIA
GUJARAT STATE
MAP1. AREAS VISITED
PAKISTAN
RAJASTHAN
BANASKANTHA
sidhpur
KACHCHH
MAHESANA
ahmedabad
SURENDRANAGAR
Gulf of Kachchh
RAJKOT
JAMNAGAR
AHMEDABAD
MADHYA PRADESH
gondal
AMRELI
JUNAGADH
keshod
Arabian Sea
Gulf of Khambat
MAHARASHTRA
International Boundaries
Regional Boundaries
District Boundaries
District Capitals
Class I Urban Centers
Major Roads
Major Railroads
Typical Taluka
Areas Visited
Routes Travelled
RAJASTHAN
PAKISTAN
GUJARAT
ahmedabad
rajkot
Bombay
Gujarat
INDIA
0 40 80 120
kilometers
0 16 32 48 64
miles

TABLE 2

Settlements Visited

Rajkot - Town	
Gondol - Town	
Jamnagar - Town	
Jivapak	Village
Gaduka	"
Dhodiya	"
Khoja Beraja	"
Badodar - Town	
Jonpur	Village
Fagri	"
Junagadh - Town	
Keshod - Town	
Chitravad	Village
Jinjuda	"
Kennedypur	"
Surendranagar - Town	
Mahsena - Town	
Sidhpura - Town	
Karan	Village
Mehtan	"
Punasan	"

TABLE 1. AGA KHAN RURAL HABITAT-DEVELOPMENT PROGRAM: PHASE ONE TASKS AND TIMING



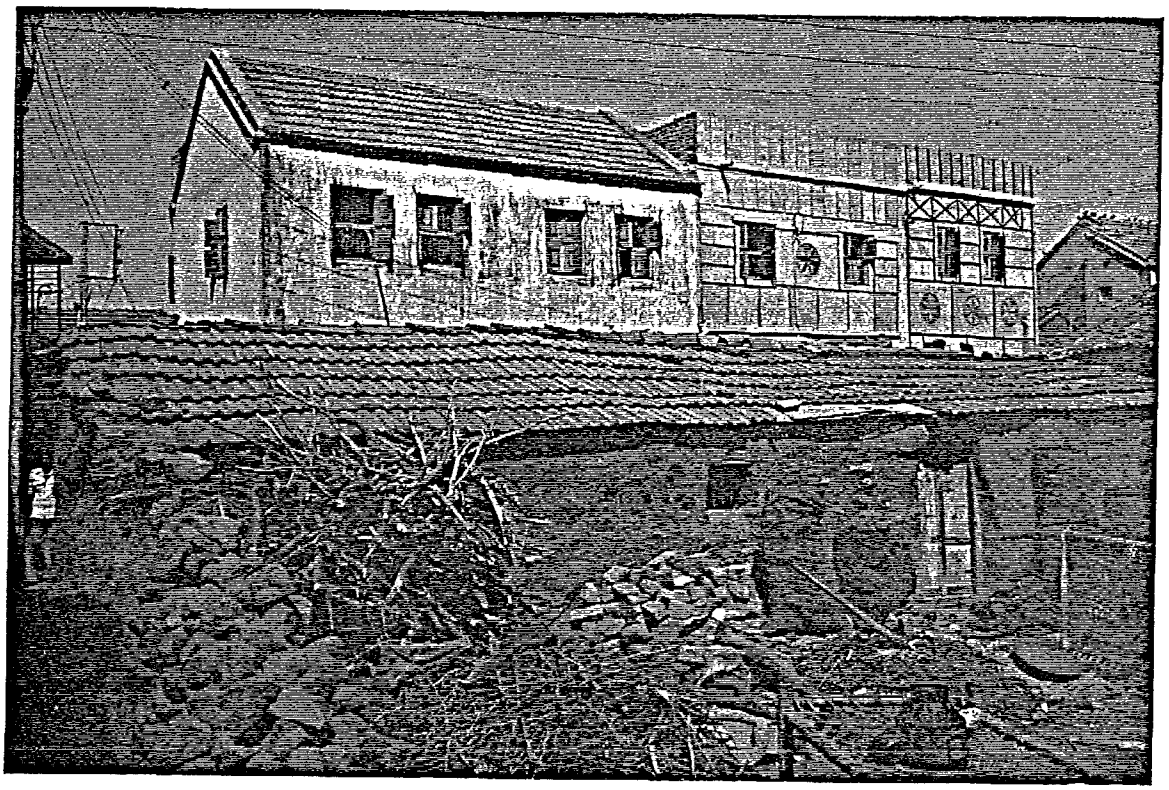


Figure 1. The rural poor need affordable examples of how they can improve their housing. . Current modern examples are unaffordable (village in Jamnagar council).

Figure 2. Ill health and low productivity can result from farm houses not designed to cope with family living , agricultural storage and animals in close proximity (village near Jamnagar council).

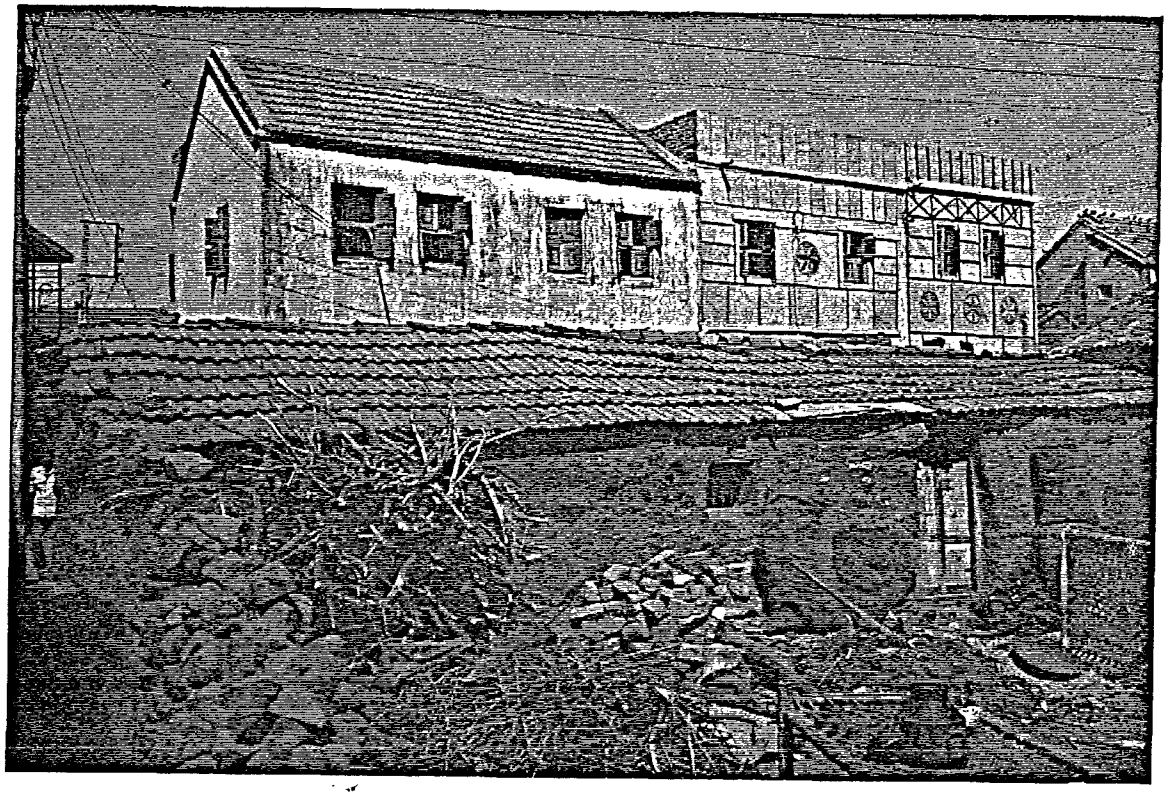


Figure 1. The rural poor need affordable examples of how they can improve their housing. . Current modern examples are unaffordable (village in Jamnagar council).

Figure 2. Ill health and low productivity can result from farm houses not designed to cope with family living , agricultural storage and animals in close proximity (village near Jamnagar council).

Figure 3. Tile roofing is still popular, but will be replaced unless the timber industry is revitalized (village in Jamnagar council).

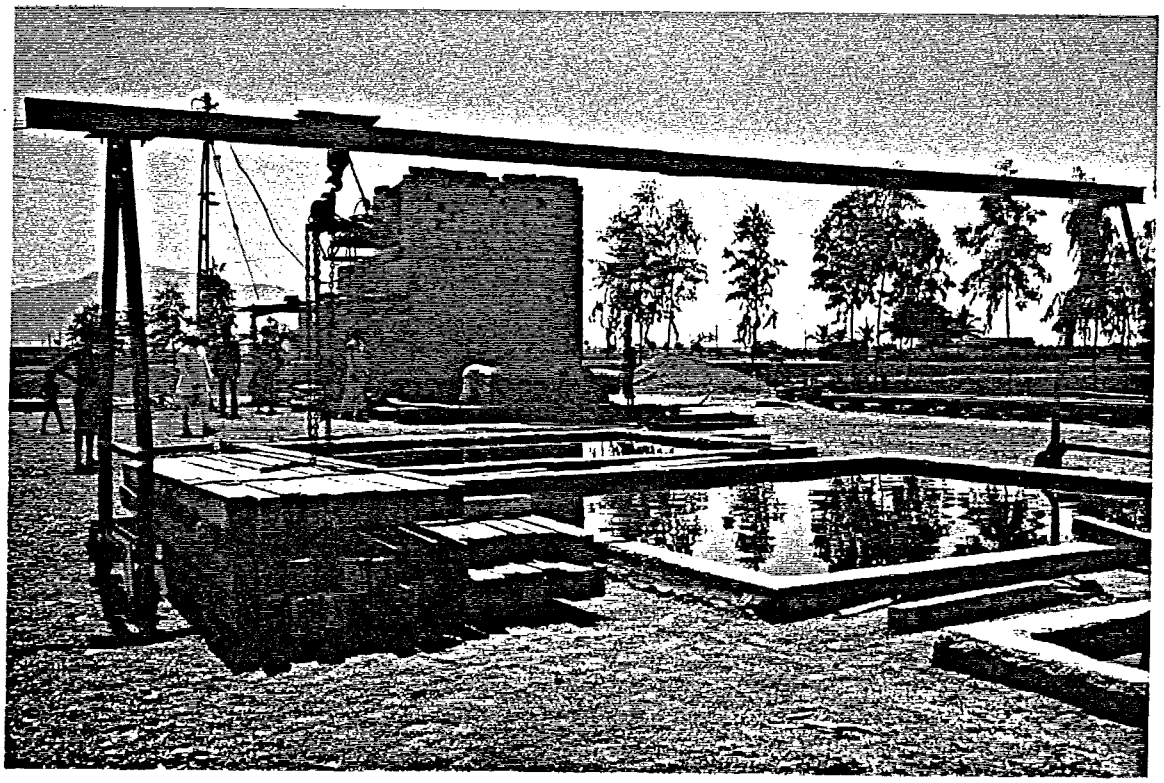


Figure 4. Precast concrete roof beams plant. Owned by city based entrepreneurs. State support for cement and steel and the neglect of the rural timber industry results in concrete replacing timber roofs (near Chitravad).

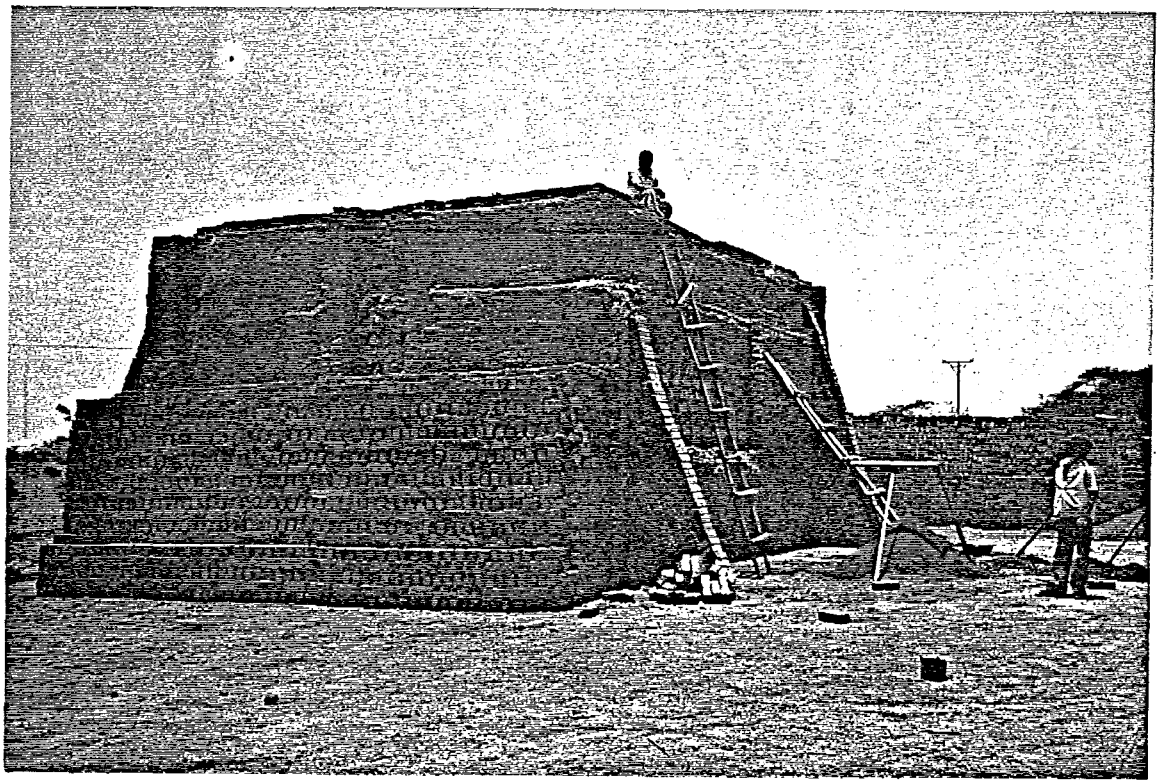


Figure 5. Brick kilns are an important family run industry (near Dhol village, Rajkot to Jamnagar).

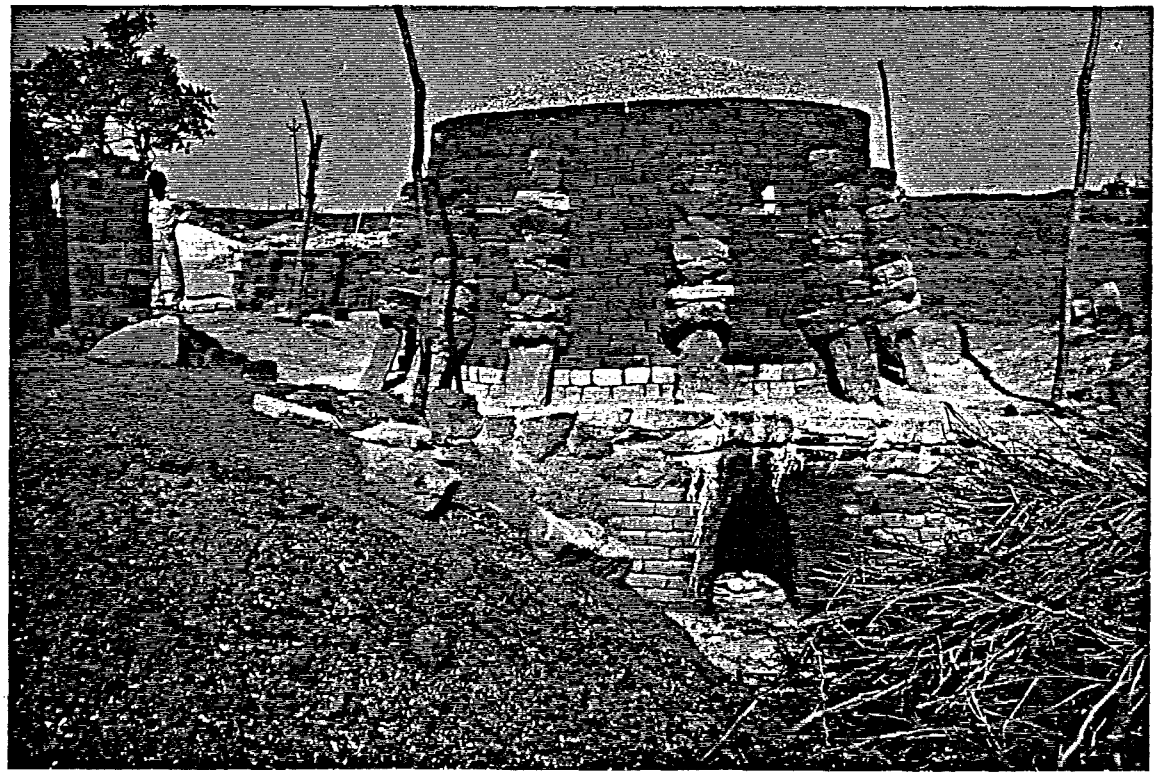


Figure 6. Lime kilns as family-based rural industry. A low-cost substitute for cement (Badodar council area).

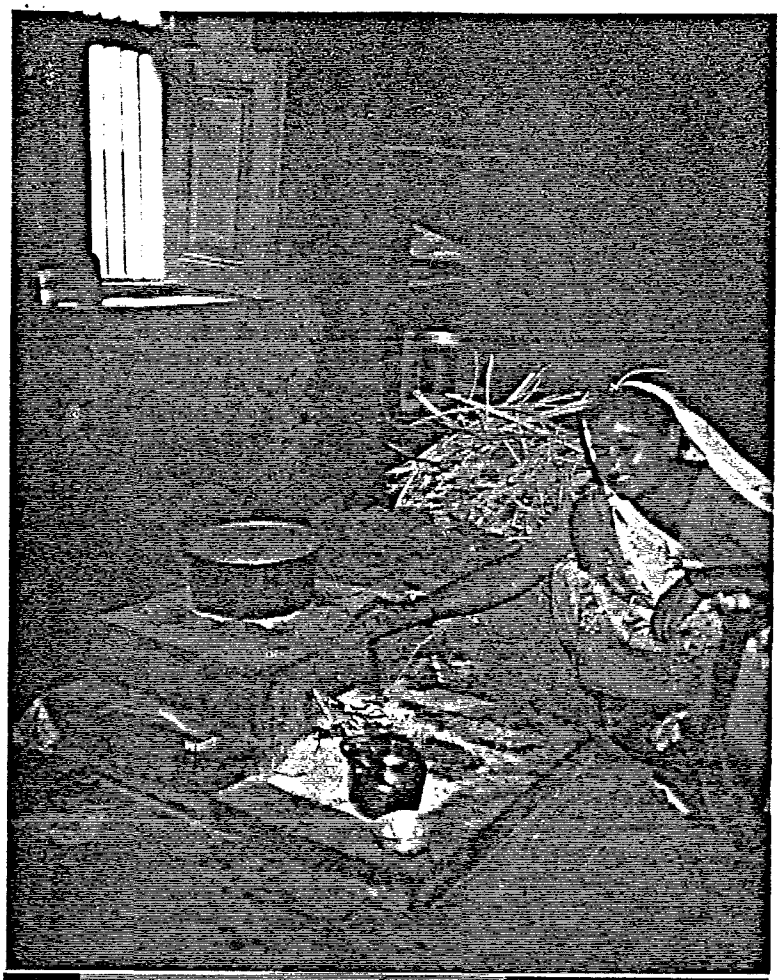


Figure 7. Feul inefficient stoves consume more wood and dung than necessary. Smoke in usually unventilated kitchens harm womens eyes and respiratory systems (Jamnagar council).

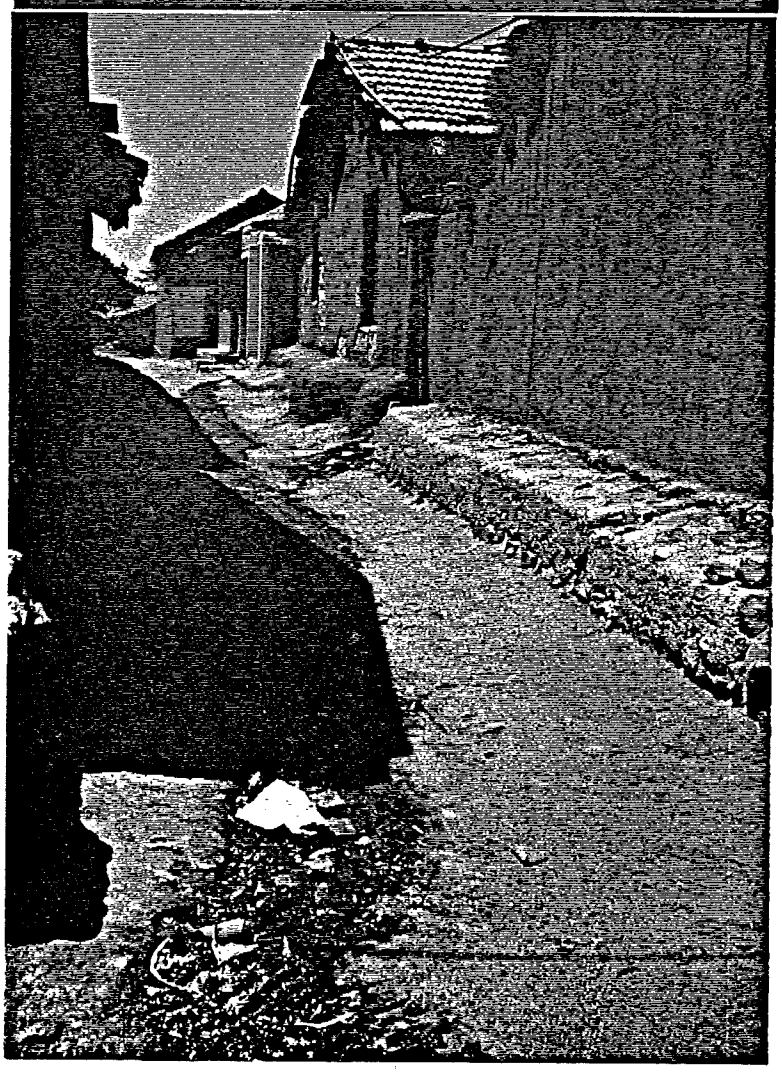


Figure 8. Lack of drainage and paving in streets can become a severe health and circulation problem once the village gets a water supply and during the long rainy season (village near Chitravada council).

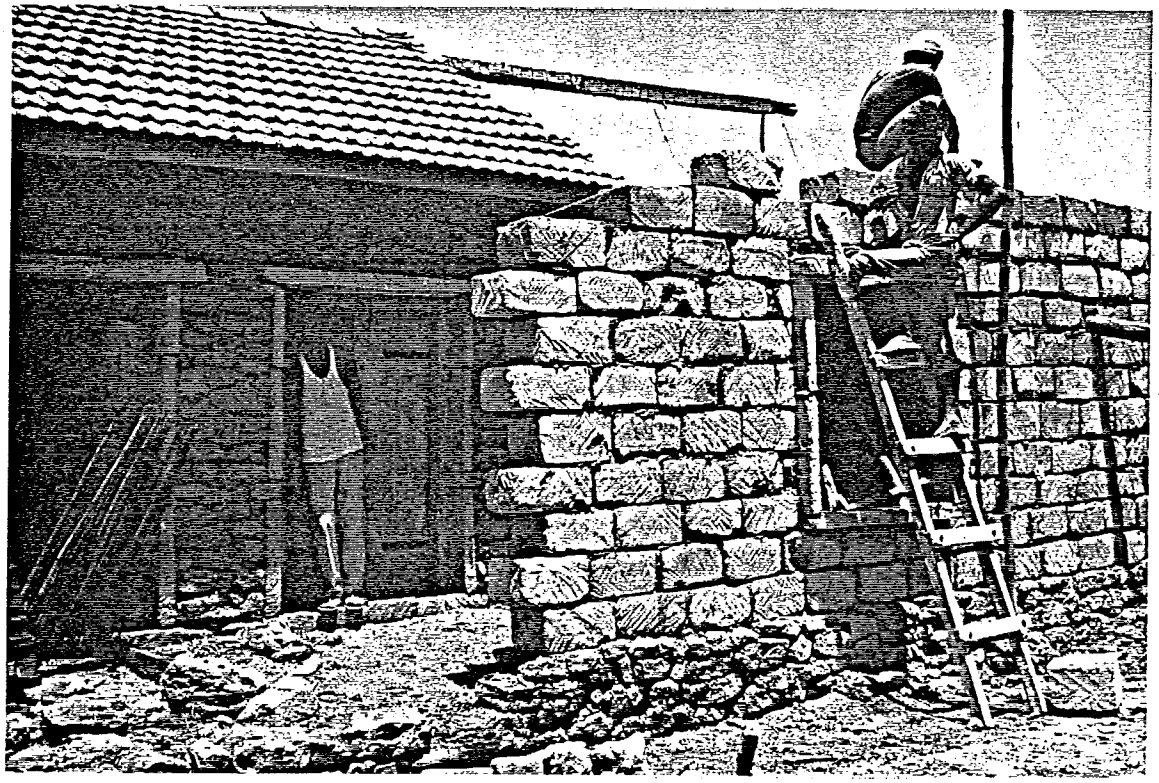


Figure 9. Local expertise - builders, materials industries, entrepreneurs etc. - should be used in developing appropriate solutions to habitat problems (Badodar billage council).

Figure 10. Local community development worker (right): working with and through progressive persons in the village may be essential to project success (Jinjuda village in Chitravada).