THE PRACTICE OF PEOPLE'S PARTICIPATION:

SEVEN ASIAN EXPERIENCES IN HOUSING THE POOR

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PREFACE

This book is the outcome of a workshop on 'The Practice of People's Participation' held at the Asian Institute of Technology in the second week of October, 1979. The Workshop, co-ordinated by Drs. J.H. de Goede, then Chairman of the Human Settlements Division, AIT, and Dr. Jorge Anzorena, S.J., of Sophia University, Tokyo, was funded by the Canadian International Development Agency.

The objective of the workshop was to bring together a group of representatives from projects involving participation which were in the process of being implemented in order to analyse and exchange experience on strategies and styles of people's participation. By so doing, it was felt that the workshop might identify and elaborate the key issues in the actual practice and arrive at conclusions and feasible recommendations for future programmes and projects.

It should be noted that the final preparation of these case studies has been at the discretion of the editor and any short comings are entirely his responsibility. At the same time, the final product owes much to the thoughtful comments made by all participants in both formal and informal discussions held during the week of the workshop.

Finally, the assistance of Khun Siriwadee Payakapan in editing, Khun Manu Kupadakvinij for graphic work and Miss Hajera Azimi for typing the manuscript, is gratefully acknowledged.

P.J.S.
Bangkok

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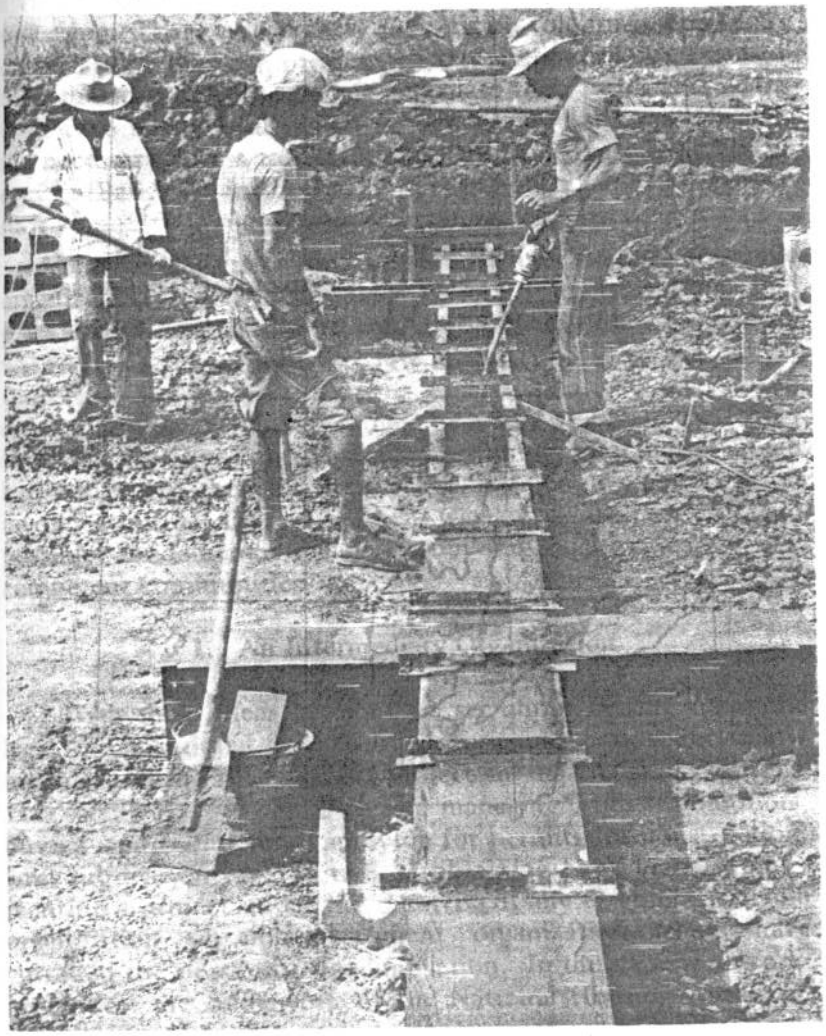

Shlomo Angel
and
Paul Chamniern Vorratnchaiphan


BURMA
LAOS
THAILAND
BANGKOK
or Krung Thepi
CAMBODIA
VIETNAM
Gulf of
Thailand
MALAYSIA
20°
15°
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Introduction

For people's participation to be a success, a structure is necessary in which people's efforts will be channelled and coordinated to produce results. Experiences with people's groups trying to organize themselves to perform complex agricultural or building activities have been, on the whole, discouraging. There is therefore, a significant role for intermediary organizations that can provide the initial stimulus for organization, that can help the people articulate their needs and aspirations into meaningful action programs, and that can provide the necessary access to technical and financial resources. However, in Bangkok, in the field of urban housing construction no such voluntary non-government organization exists.

The promoters of this project, all members of academic organizations, non-government voluntary organizations and government agencies, were united by their desire to explore ways and means of assisting low income people to gain access to secure housing arrangements as part of a process of community building. Further they had had various experiences involving participation by people in community activities which had confirmed them in their belief that people's participation involving mutual-aid and self-help was an obvious, suitable and possibly fundamental means of building healthy, caring and competent communities.

1. An Intermediary Organization

With these ideas in mind we set about finding a suitable legal organizational structure which could implement a low income housing resettlement project in the Bangkok context. This would involve obtaining and managing funds from donors, buying and selling land, applying for permits for construction, land subdivision etc., as well as obtaining bank loans. Implementing a project under the umbrella of any existing charitable organization of non-government organization would have curtailed the possibility for innovation. In the same way working within the framework of the National Housing Authority would have also necessitated adherence to established bureaucratic procedures. So whilst seeking the active support of the National Housing Authority, both formally and through informal consultations with the NHA planners and architects, an independent body was chosen for the implementation of

the project.

Whilst it would have been more convenient to create a non-profit corporation it was not possible to do so as no such legal structure exists in Thailand. One remaining option was to form a non-profit making company rather than a foundation or association and this was finally preferred because of the ease and rapidity of registration. Registration of foundations and associations is at the discretion of the appropriate government authority and may be delayed for quite some time. Furthermore a company has the image of practical efficiency and thrift whilst a foundation or association both have strong connotations of charitable activities which tend to make people expect something for nothing.

The Building Together Company was formed in August 1978 with a shareholder's Agreement binding all to a non-profit operation in keeping with the objective of assisting the poor in obtaining low-cost housing. While there are still a number of complications in operating a non-profit company, particularly in the area of accepting contributions and its liability to pay income tax on such contributions, on the whole the company has been able to operate smoothly. The legal status of the company has enabled it to obtain contributions from abroad for use in the project, and has provided the necessary access to government agencies and the Government Housing Bank.

The honorary shareholders and directors of the company, all working voluntarily, provide the necessary contacts and ensure access to expertise. The company also employs the services of full-time professionals, consultants, social promoters and skilled workers. The first project is not seen as a single demonstration project, but rather as a lesson for future projects to be carried out by the company independently, or in cooperation with other groups. The company is thus set up as an organization for attracting and training young committed people to work for housing with low-income people.

Presently, steps are being taken to register another intermediary organization, the Building Together Association, which will function as a non-profit association, organizing and promoting low-income housing activities. Once the association is formed, it will assume responsibility for all funding operations and thus leave the company free to function as an executive organization, carrying out housing peojects which will be financed by the association. Clear relationships between the

two organizations will have to be established over time. The growth of these organizations will, in turn depend on building stronger links with the people in the communities. The ultimate aim will be to transfer as many duties, tasks and responsibilities to the people themselves.

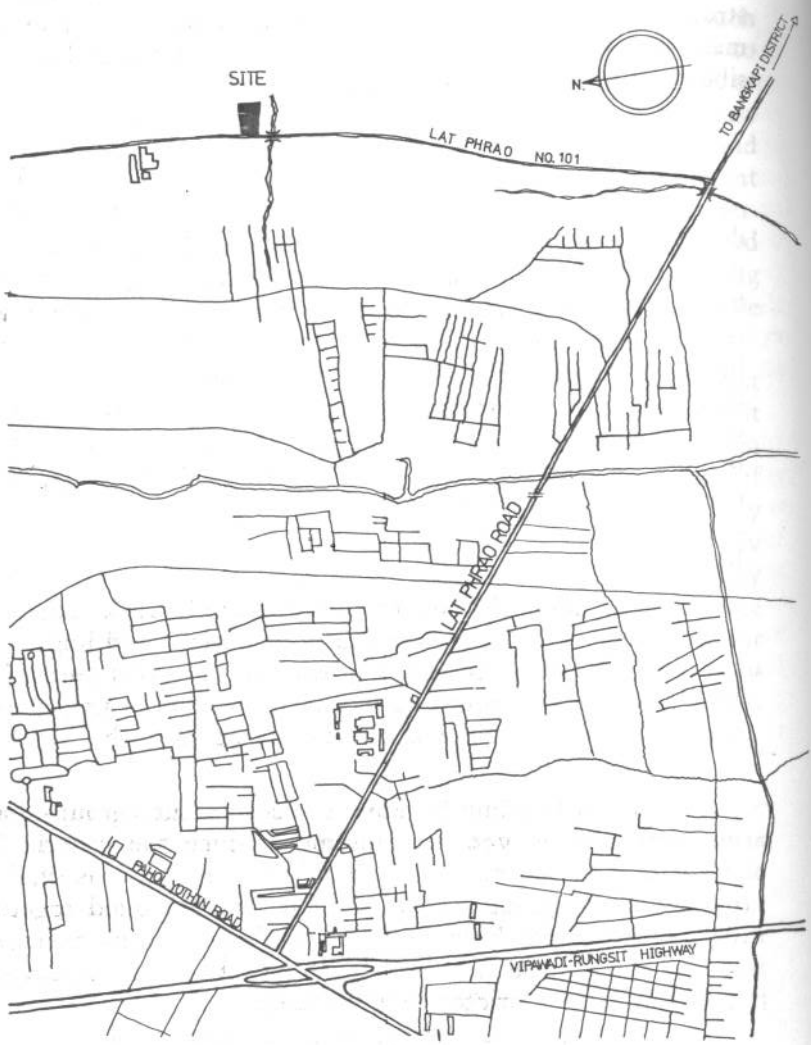
2. Land Purchase

The order in which projects necessarily evolve has much to do with the potential for people's participation in the projects, particularly in the crucial area of decision-making. On the one hand, involvement of people in decision-making is preferable if serious mistakes in judgment are to be avoided. On the other hand, real participation involves the creation of a situation in which people can participate meaningfully. If one is dealing with a community which is already organized and may already occupy a fixed location, such as a slum community or a village community, participation in the early stages of project development is possible. People can be consulted right from the beginning.

Slum communities, however, are not the prime target for urban resettlement. They are best left in place and improved. Resettlement, unless forced by eviction, involves individual families, or related groups of workers, teachers or employees, organized through their work or through some other form of voluntary organization.

In the first Building Together Project, no such groups have been identified as yet. Furthermore, since the criteria for participation in the project have been rather strict, as shall be explained later, groups of people that have applied together have on the whole been rejected, and only a few members meeting the project criteria were admitted. The project has thus largely been restricted to individuals.

For individuals to participate meaningfully in the project, several initial developments have had to take place. In the first place, trust had to be established. The project has had to appear as a serious proposition to people, since they were to be required to make major commitments themselves. Hence it was found necessary to buy land, plan the site, and design and experiment with the houses before people were recruited into the project. Part of this was brought about only because this was the first project. In the future, groups that have applied for participation can be contacted at an earlier date for crucial



Location of the Building Together Project in Bangkok.

decisions on such matters as location, site layout and building design.

The key criteria for selecting land for the project were access to job opportunities and services through the public transport network, ability to pay for land, and size of plot to accommodate a small community. These were in turn translated into specific criteria:

1. Walking distance from major bus routes (less than 1 km.)
2. Land price less than ฿ 1,000/sq wah* (US $25/sp m)
3. Size of plot enough to house 60-600 families.

Minor additional criteria included natural level of land, availability of good road access, electricity, water and drainage facilities, shape of plot, and surrounding residential area.

It was calculated that if a plot was found within walking distance of a major bus route, savings in transportation over time would amount to ฿ 15,000 (US $ 750) per family, thus justifying the purchase of good land within the city area. The plot of land which was finally purchased in November, 1978 does not meet this criterion as it is 1.5 km from a major road, hence requiring in many cases a short ride on a mini-bus to the road, eliminating potential savings on transport.

The land is located on a paved road, with a drainage canal along one side and with access to electricity and telephone services, but not water. A school is located a few minutes away, on the grounds of a large temple. Residential communities and small factories are springing up along the entire length of the road. The major road, Lat Phrao Road, is a fast growing commercial and service area, and carries four major bus routes.

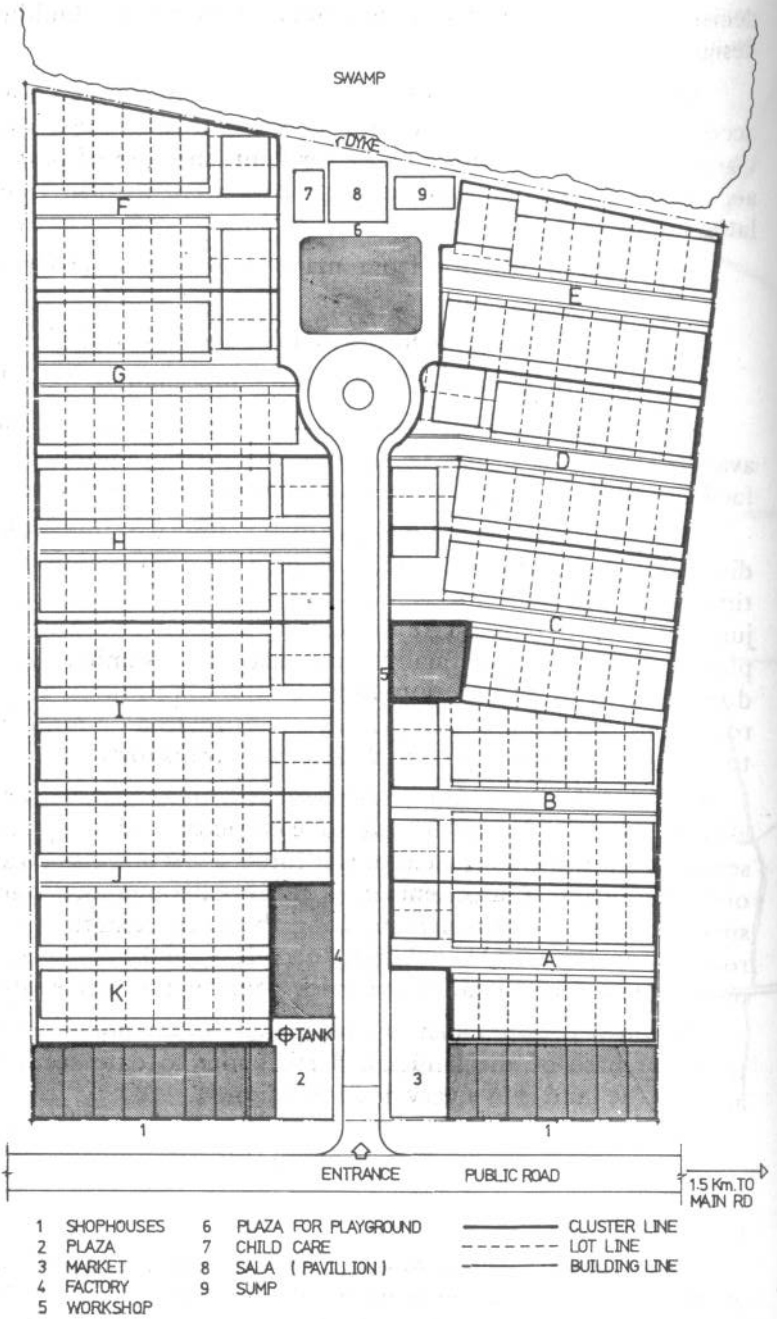
Though people could not participate in discussions leading to the purchase of the land, all participants to date seem to agree that the land is in a very good location.

3. Site Planning

(a) Density

The preference for a good urban location necessitates an economical use of land, without the destruction of community life, and allowing for ownership of land and house. These

* 1sq wah = 4 sq m approximately



Site plan of the new community in Lat Phrao Road.

requirements call for high-density low-rise designs, where houses are arranged in rows, are two or more storeys high, and have only small open spaces at the front and back (see site plan opposite).

The site will house 200 families. The site area is 10.6 rai* (1.7 hectares), and if average family size is six, the population density in the site will be 115 people/rai or 706 people/hectare. There densities roughly compare to densities in Bangkok slum areas today.

Plot sizes are 4.80 m x 12.0 m = 57 sq m, and the total area occupied by plots is 68 per cent of the total site area, thus leaving sufficient land for community facilities. People's preferences are for enlarging the size of plots at the expense of reducing the land for community facilities. This may be a short-sighted preference, and may not be in the long term interest of the community as a whole. Decisions on density, at this stage, did not involve people's participation.

(b) Clusters

As mentioned earlier, houses are grouped into 11 clusters of 15-20 houses. Each cluster is surrounded by a perimeter garden wall, and has a main walkway along which the houses are arranged. The main walkway can be entered from the main site soad or from the perimeter walkway surrounding the entire site. Both these entrances may be blocked, if desired. Near the main entrance, each cluster has a shared open space, bounded by high two-storey walls on two sides. These walls may later be painted with large murals by Thai artists, in consultation with the cluster group. Each cluster is therefore conceived of as a separate, semi-independent unit within the larger community.

(c) Community spine

The clusters are arranged along the main site road and their open spaces open out to the road. The road is a cul-de-sac. Electricity, water supply, drainage and sewage lines are along the road, and extend into the clusters along the cluster walkways. All the community facilities are also located along the road: the community hall, the market, the plaza, the water tower, the factory and workshops, the clinic, the playground, and the sala. The road forms the community spine, that ties the community together. The facilities are grouped near the entrance as well as the end of the site road, thus encouraging

* 1 rai = 1600 sq m approximately

walking along the road in the evening as well. Moreover, since the site road is blocked and leads nowhere, strangers are discouraged from entering the community and the people thus have the control of their territory. They are gradually able to recognize each other, to perceive their common identity and their common interest, and to act as a community.

(d) Infra-structure

The infra-structure services for the site were designed with low-cost as well as community participation in mind. Instead of expensive land fill, a perimeter dike was constructed, coupled with a storm drainage system which collects excess water into a sump, and then pumps the water into the nearby canal. This drainage system, while considerably cheaper than land fill, requires regular maintenance. Manholes pipes and sump must be kept clean and unclogged and pumps must be maintained at operational levels. Both are a community responsibility and the community must take charge of their proper performance.

Sewage will be partially treated in individual septic tanks, and excess water will flow into the drainage system. Water will be provided from a deep well, and the maintenance of the well, as well as the collection of water charges will be a community responsibility.

To prevent potential conflicts, all service lines are on community property, and each plot is serviced directly. This requires all services to be located along the site road and the cluster walkways with no services at the back of walkways and behind the clusters.

While the basic elements of infra-structure will be of good standard, to reduce future maintenance, the cluster walkways will be left with gravel surfaces. Their design, however, allows for future upgrading into a 3.0 m. road, which could provide road access to individual dwellings.

4. Implementation Strategy

The phasing of construction roughly follows the procedures developed by FSVDM in El-Salvador and is divided into three main phases:

a. Site development by outside contractors.

b. Mutual aid construction of basic houses.

c. Self-help completion of houses and construction of community projects.

The people do not participate in site development but participate in mutual aid construction of their clusters, and move into the houses. In the third phase, they gradually complete their houses, and through common effort, develop community projects on common land. This process is designed to save time by employing outside contractors, and limits the area of initial participation to mutual aid cluster construction. Other variations, such as mutual aid construction of infrastructure, and allocation of sites to participants may be considered for future projects.

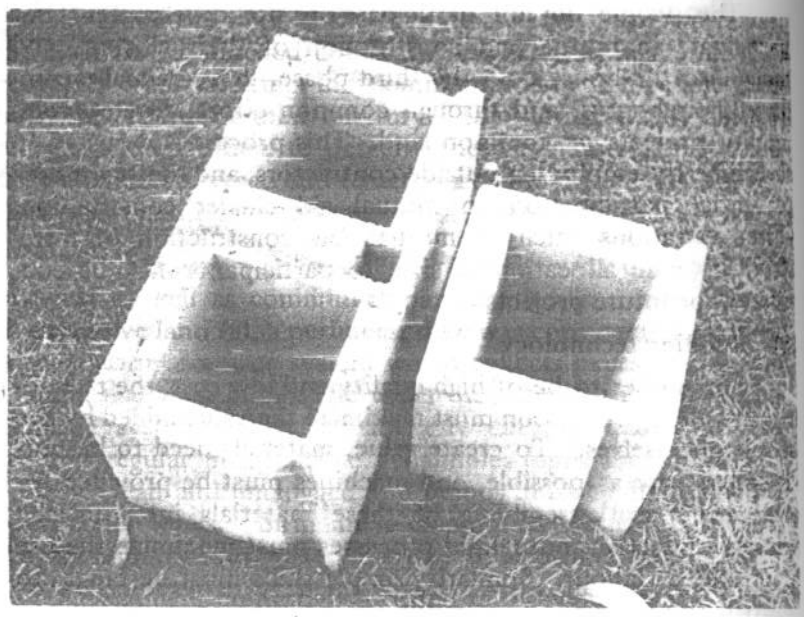
(a) **Building technology**

For houses to be of high quality and low cost, the technology for their production must maximize the value added by the people themselves. To create value, materials need to be purchased as raw as possible, and machines must be provided for production and assembling of these materials into finished houses. Effective mutual aid processes must maximize the use of unskilled labour. Similarly, simple skills must be taught to individuals who can then engage in repetitive production and assembly of components for several houses, thus taking advantage of the principle of division of labour.

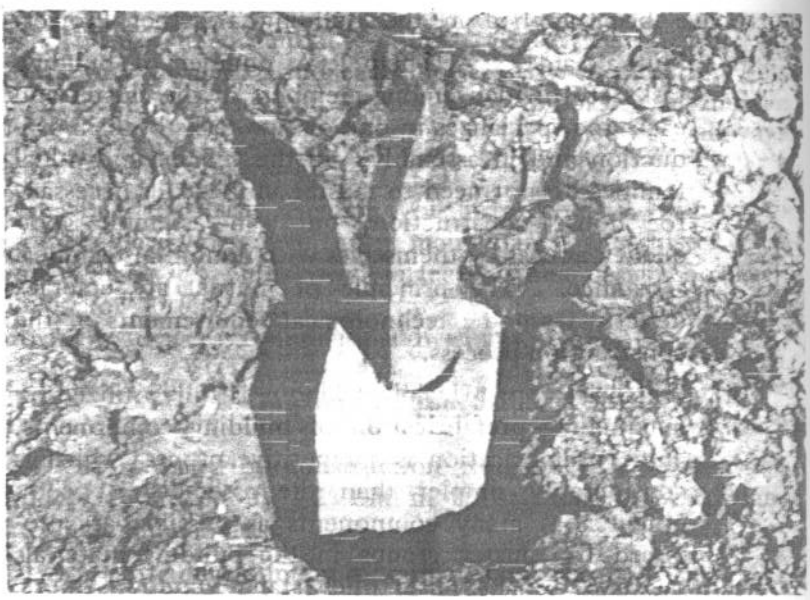
Two key principles which emerge from these considerations have been applied in the Building Together Project:

(i) Mutual aid vs. self-help: A number of building tasks are divided among members of the cluster and each one specializes in one or two tasks both in production and in assembly. In this manner individual families do not need to master all the skills necessary for house construction, but can assemble good quality houses by themselves with minimum technical assistance. The principle of mutual aid emerges directly from the technological requirements of the construction process.

(ii) Prefabrication: Unskilled labour is fully utilized by maximizing prefabrication of building components. Since prefabrication is a repetitive process which is considerably simpler than the assembly of components, as many components as possible are produced by cluster groups in the building materials factory: blocks, joists, piles, stairs, windows, doors, and railings.



Interlocking blocks used in the project: cement is poured into the small holes to lock them together.



Short interlocking piles developed for the project.

(b) **Technology and participation**

Participation is much easier when traditional technology can be used. Traditionally, both in the village and in urban slums, people build wooden structures, using a post and beam structure. These are quite easy to build and can be completed within a short time period. This technology was rejected, however, for three reasons:

a. During the past two years wood costs have increased sharply, and have surpassed the cost of concrete.

b. Traditional houses are free-standing. The need for good land reduces the size of plots and requires row-house construction.

c. Code requirements for row-house construction requires the use of fire-proof walls.

In order to maximize prefabrication and mutual aid, a building system had to be identified and adapted for use in the project. Bruce Etherington who has developed and experimented with a system of interlocking concrete blocks and joists in the Philippines, was invited to be the master-builder for the project.[3] Using steel moulds, a number of interlocking concrete blocks types have been produced which fit together without mortar, and are used as load bearing walls, as channel blocks for perimeter beams, and as partitions. A thin concrete joist is also cast to fit into openings between the blocks. The concrete blocks and steel joists form the basic structure of the house which is supplemented by wooden components for stairs, doors, windows, and railings and asbestos sheets for the roof. Since the house is rather heavy compared to a post and beam structure, new short piles which can be connected to each other have been developed at AIT for the project.

All these materials can be produced by the people themselves and require only small simple machines for their production and assembly. No prestressing of components is necessary, and all the components are light enough to be carried by hand, eliminating the need for cranes. The only machines required in the factory are the block-making machine (made in the Philippines), concrete mixers and vibrators, moulds for special blocks, joists and piles, and wood working tools for the wooden components. During assembly, a small pile driving machine, scaffolding, simple hoists, and a small truck pulling platforms laden with finished building components from the

factory to the site are required. All the machines can be operated by unskilled labour with a minimum of instruction and supervision.

5. House Design

Again, the basic house design was developed independently of the people, particularly due to scheduling difficulties and the adoption of the row-house principle to economise on land. An identical design of the basic houses is necessary to the mutual aid process, whereby all basic houses are completed before they are allocated to individual families. Several key ideas guided the design of the house:

a. Land ownership: Houses must be built on individual plots of land, which would eventually be owned by their occupants.

b. Support: The basic houses should provide a support structure for further gradual improvements.

c. Economic activity: The house should be used as a means of production, rather than as a commodity which is gradually consumed.

d. Tradition: Thai traditions and life-style should be incorporated into the design whenever possible.

e. Standards: To the extent possible, the houses should comply with buildings codes and standards, so as to avoid unnecessary confrontation with authorities.

f. High density: Houses must consume a minimum amount of land, to allow for the purchase of land in a good location.

The elaboration and articulation of these ideas resulted in a basic house design which contains the following patterns:

a. Row-house: Houses are arranged in rows, sharing common walls. The plots are long and thin, and the houses are cross-ventilated in their longitudinal direction.

b. Shell-structure: The basic houses are two-storey structures, covering two-thirds of the site area. No interior partitions are provided, and only the upper-storey room is finished initially. The shell provides a support-structure for easy gradual improvements, in contrast with a core-house which is cheaper

initially but more difficult to expand in a controlled manner, especially upwards.

c. Living upstairs: · Following traditional Thai customs, living areas are located upstairs, and arranged in a strict sequence, from the most public to the most private-stairs, verandah, living area and sleeping area. The verandah overlooks the cluster walkway and the street, and functions as an outdoor room.

d. Economic activity below: The ground floor space is left unfinished, and only contains a toilet, a bath and a kitchen area in the back. It can be used for supplementing the income of the family, by opening a shop, a workshop, a restaurant, or by sub-letting the space for rental income. The ground floor area is also accessible for vehicle parking, if the need arises in the future.

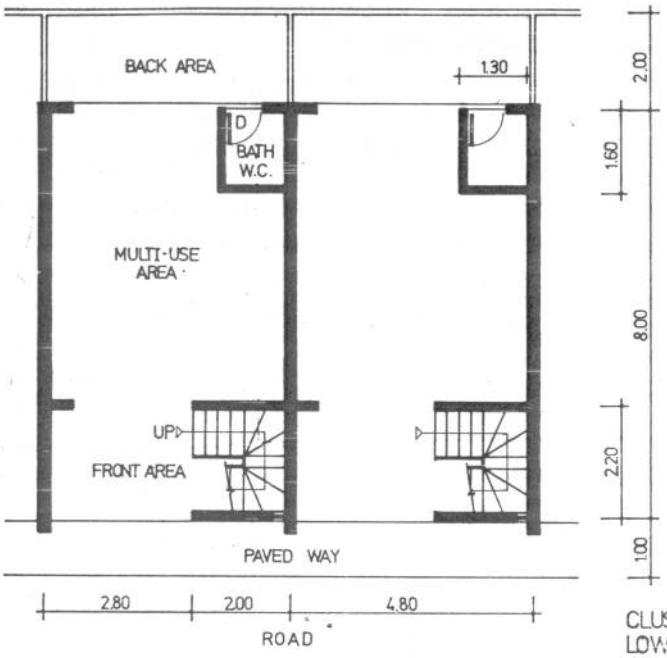
e. Wide span: The houses are 4.80 m wide, making it possible to partition the upper floor into two rooms each 2.40 m wide, and thus allow for a large number of internal arrangements to meet specific needs.

f. Front and back courts: Small 2.0 m. wide courts are provided to the front and back of the house to meet code requirements, to facilitate cooking, laundry and washing in the back, and to plant decorative plants and trees in front.

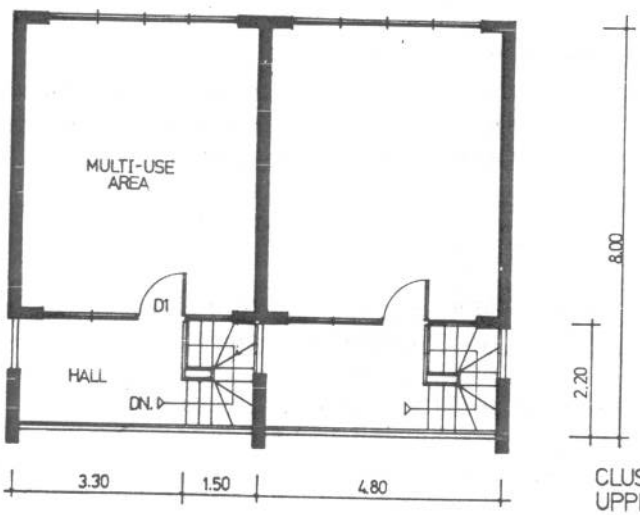
g. Indigenous decoration: Traditional carvings decorate the verandah and provide an aesthetic touch to the otherwise heavy appearance of the houses.

(a) **Demonstration houses**

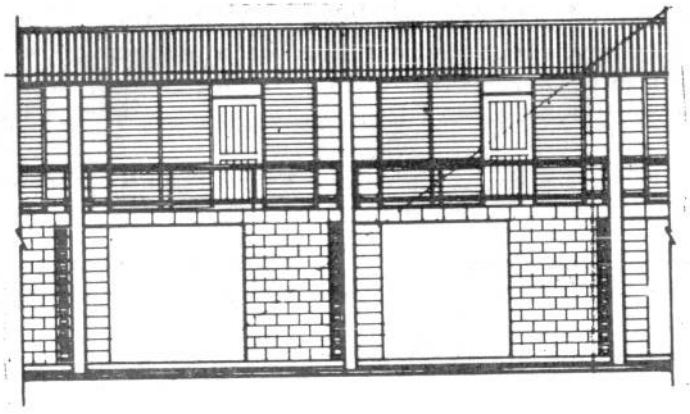
Two demonstration houses were erected on the campus of AIT to test different building materials, construction techniques and designs and to ascertain the actual costs and man hours involved. House I utilized the hand made sand-cement interlocking blocks and a bearing wall design whilst House II used commercially available concrete blocks and a skeleton structurre. They were subjected to an evaluation by members of the first cluster group. The results of the evaluation appear in Table 1 below. Plans and a section of the house appear in Figures 1, 2, 3, and 4. While the house is within the ability to pay of the target group, it is by no means a minimal house. Future projects will need to consider a more minimal basic house which would house lower income families. The current



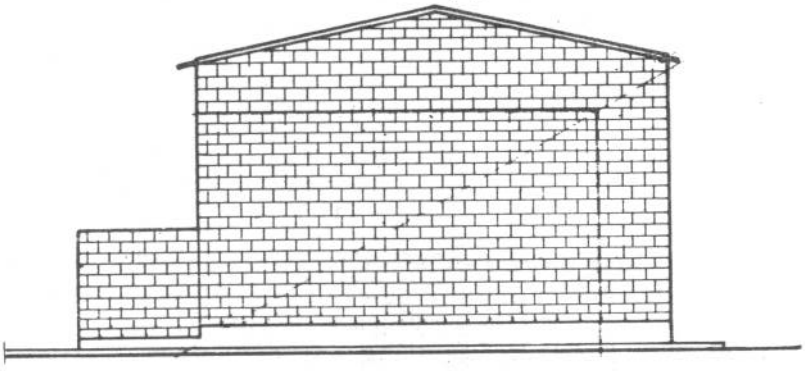
CLUSTER PLAN:
LOWER FLOOR



CLUSTER PLAN:
UPPER FLOOR



FRONT ELEVATION



SIDE ELEVATION

cost of the materials for the house is ฿ 30,000, and the cost of the plot is ฿ 20,000 excluding infra-structure. Building a smaller, say a one-storey house, or a thinner house could significantly reduce the quality of the house, while only moderately reducing its cost.

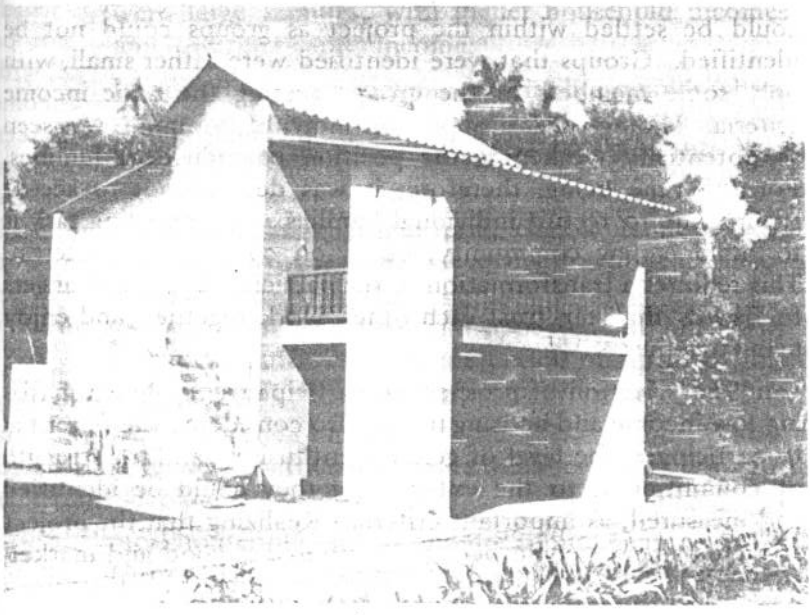
Table I: **The Degree of Acceptability of Various Features of the Proto-type House, based on a Survey of 23 Participants, 1979**[4]

Design Feature of House	Degree of Acceptability (per cent)		
	Approve	Neutral	Disapprove
1. Size of plot 4.80 m x 12.0 m	100	0	0
2. Size of house	100	0	0
3. Row house design	83	0	17
4. Two storeys	83	17	0
5. Ground floor space for economic activities	100	0	0
6. Verandah upstairs	87	0	13
7. Small court in back	74	0	26
8. Toilet near back court	100	0	0
9. Unpaved ground floor	26	0	74
10. Asbestos louvres for windows	26	52	22
11. Design is aesthetic	65	35	0
12. House better than old house	87	9	4

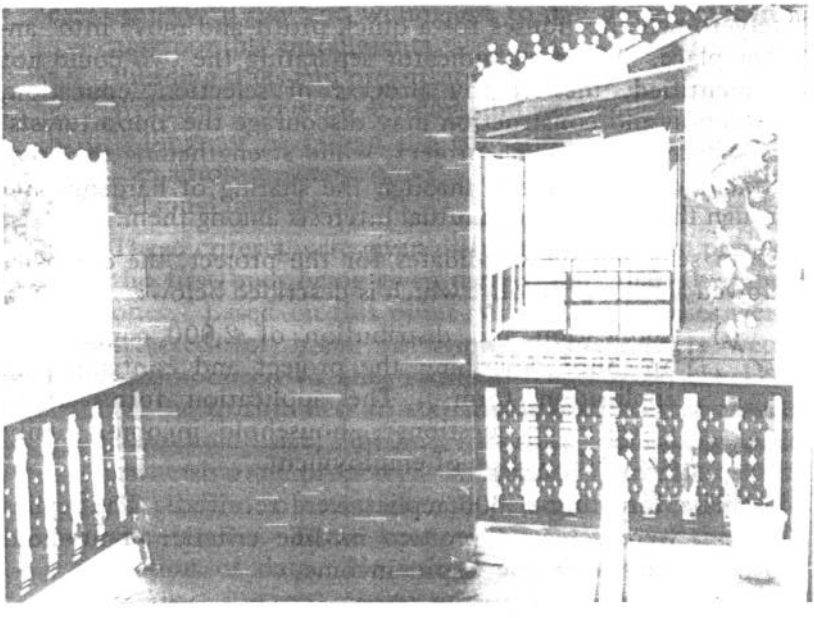
6. The People

(a) Selection

The long process of selecting participants has proceeded hand in hand with physical development, in order to save time. Once contact with the people is established it is crucially important to maintain the momentum of the project. Development must be seen to take place, and changes must be experienced regularly. Otherwise, the enthusiasm of the people will wane and eventually disappear. True participation involves the harnessing of a lot of energy which can evaporate if the organization of the project is hazy, sporadic and inefficient. Since many steps in the project involve outsiders, there are many possibilities for long delays which can be handled quite easily as long as the people are not involved, but would seriously damage their morale once their participation on a regular basis has commenced.



One of the demonstration houses erected at AIT.



The verandah on the demonstration house showing traditional carving.

As mentioned earlier, organized low-income groups which could be settled within the project as groups could not be identified. Groups that were identified were rather small, with only some members of the group meeting the basic income criteria. Mixing small groups with individuals families was seen as potentially weakening the position of individual families. For the time being, therefore, it was decided not to accept groups but to recruit individual families. The resulting task is to build a new community, based on common self-interest. This requires a transformation of the participants from strangers to friends that can trust each other, work together, and enjoy living together.

The selection of prospective participants, while emphasizing low-income and housing needs, also considered the potential to participate, the level of genuine enthusiasm and the strength of commitment, to the extent that they could be identified and measured, as important criteria. Realizing that the project attracted many people because it offered a good and marketable house, and not only because it provided satisfactory shelter, we have also searched for means to identify the 'stayers' as against the 'opportunists', i.e. those likely to stay in the community once the houses are completed, as against those likely to sell the houses for a quick profit and move into another place. While an indicator separating the two could not be identified, the lengthy process of selection, education, production and construction may discourage the 'opportunists' from taking part in the project, while strengthening the commitment of the 'stayers' through the sharing of hardship and through the discovery of mutual interests among them.

In selecting the candidates for the project, the company followed a strict procedure which is described below:

(i) Publication and distribution of 2,000 copies of a brochure describing the project and containing an application form. The application forms asked three main questions: household income, family size and location of employment.

(ii) More than 1,000 replies were received. The replies were screened on two income criteria: household income and per capita income.

The general rule was that monthly household income should be less than ฿ 3,000 and that per capita income be less than ฿ 700. The exception to the rule

were large families, with higher household incomes and lower per capita income.

In addition to the income criteria, households whose main job location was too far from the project were also eliminated from consideration for this first project.

Based on these two criteria, eligible families were invited by mail to the site office for in-depth interviews.

(iii) 767 families responded and appeared for interviews at the site office during the period of April to June '79. Some families were also interviewed in the slum areas.

The interviewers focussed on a number of criteria for selection:

a. Real household income and per capita income
b. Current housing situation, and ownership of property
c. Urgency of housing need (eviction threat, high monthly rent etc.)
d. Job location
e. Ability to pay and willingness to pay down payment and monthly installments
f. Building skills and organizational skills
g. Willingness to work evenings and weekends
h. Willingness to attend the education course and later join a housing cooperative
i. Personal impression.

(iv) These criteria were given different numbers of points, the first ones being given more points than the later ones. Based on this point system 250 families were selected for home interviews. Interviewers went unannounced to the houses of candidates, checked on the truthfulness of statements made earlier about household size, income, housing condition and ownership of property. Neighbors were also asked to confirm information and personal impressions of the family. These house visits completed the collection of data. No references were asked for any family, and no recommendations were received to strengthen the chances of any one family. Pressures to favour one candidate or one group were resisted.

To-date, approximately 140 participants have been selected. The rest will be selected this year. The need for a rigorous selection procedure was brought about through the pressure of donor agencies to restrict the project to poor people, on one hand, and because of the need for a just, non-corrupt process on the other. The credibility of the project would substantially diminish if it was seen to favour some families over others, or if people could gain access to the project by applying pressure through influential contacts.

Although much attention was paid to selection many difficulties still remain particularly in obtaining reliable income information. In addition, very low-income people failed to apply in great numbers. Information distributed in the slums was insufficient to arouse their interest, even in cases where they could apparently afford the payments. Consequently more time and effort will need to be spent in the future in attracting these people to projects, even though very large numbers of people with higher incomes continue to apply.

(b) The cluster group

Once participating families were selected, they were divided by lottery into cluster groups, each cluster containing 16-20 families. Skilled participants, carpenters and masons, were distributed equally among clusters. The cluster groups form the initial basic organizational units in the project. Each cluster group is organized during an extensive education course into a mutual aid group for building construction, as well as a credit union group. Group leaders are here identified. The group then enters the building materials factory to produce components for all the houses in the cluster, and then leaves the factory to assemble all the houses on the cluster site. After the houses are completed, the group decides on the allocation of houses to individual families. The houses and the cluster land are then transferred to the cluster group, which holds them in common ownership until it decides to subdivide the cluster into individual lots. Members who then wish to sell their houses are encouraged to agree to allow cluster members to screen new candidates, and to propose their own candidates before transactions are completed. When the larger community organization evolves, representatives of each cluster will form the community central committee. In the long run, the community organization will become the legitimate and legal organization, but the cluster continues to be the basic component in representing individual families.

Khun Kanok, one of the B.T. Company directors explains the lottery process to participants.

The cluster group is therefore an organization of people, as well as a small neighborhood. As an elementary organization it performs the task of building trust among members, initiating a dialogue among them and acquainting them with the various arrangements in which they will be involved.

The cluster concept is not by any means new. A discussion of the concept appears in Alexander et al (1976).[5] The El-Salvador Foundation for Minimum Housing (FSDVM) also uses cluster groups of 20 families in the construction of houses in their sites and services schemes.[6] These and similar ideas cannot be applied uncritically to the Thai context. Experience with the organization of clusters in E1-Salvador, for example, has led to the eventual elimination of the preliminary education course. Similar developments can be expected here as more experience is gained.

(c) The community

The building of a self-reliant community were neighbors are involved in the day-to-day operation and care of their environment is one of the primary goals of the project. Ultimately, a legal organization will be formed gradually assuming

the full responsibility for the community, and thereby allowing the Building Together Company to withdraw from the project.

The legal form of organization has not yet been finalized but preferences lean toward the creation of a community co-operative under the existing co-operatives law. The community organization will be formed once one or two clusters come into being, with the idea of involving all project participants in the organization at the earliest possible stage. Realizing that the managerial experience of members is limited, we cannot expect them to assume full responsibilities immediately, but we want them to understand at the outset that eventually they will have to assume full ownership and full control of their community.

7. People's Participation

(a) Education

The first stage of participation in the project involved compulsory attendance of the education course. The initial education sessions aim at building a commitment to the project's goals through the articulation of the common self-interest of participants.

The education course for the first cluster group was divided into ten weekend sessions:

Session 1: **Knowing One Another** The members met to learn of one another's backgrounds and reasons for joining the project.

Session 2: **Housing Problems of Low-income People** This session involved a slide presentation and a film depicting the housing problems of Thailand's urban poor. It was followed up with small group discussions.

Session 3: **Visit to Demonstration Houses at AIT.** Participating families visited the two demonstration houses and evaluated them for the purpose of improving the design.

Session 4: **Our New Community.** This session was aimed at building the participants' sense of unity and having them discuss how to maintain their new community together.

Session 5: **Financial Arrangement.** Budgeting, monthly

financial arrangments, and the system of installments with the Government Housing Bank were were explained to the participants.

Sessions 6 and 7: **Credit Union.** These two sessions concentrated on savings co-operatives and an explanation of credit unions in Thailand – their history, organization, and activities.

Session 8: **Building Techniques.** This session dealt with the physical arrangements of construction, building techniques, man-hours and labour inputs.

Session 9: **Building Techniques.** A continuation of the above session, this meeting dealt with the production and assembly stages in more detail. Participating families were made to understand that they had a commitment to contribute regular labor hours.

Session 10: **Graduation and Evaluation.** This final session was a celebration of the participants' having completed the training program. Building gether T-shirts were handed out and photographs of the group taken. Finally, the education package as a whole was evaluated.

This course is only the initial bond among members. It is expected that the key mechanism of forging a strong group from individual members is the process of building together, the actual construction of houses in the mutual aid process, where each member must accept responsibility for a number of tasks which contribute to the common effort of the group in housing itself.

(b) **Construction**

Upon completion of their education course the families of Cluster I began to fabricate the structural components of their houses in the site factory. Cluster II meanwhile began their education course.

It is clear that this project makes considerable demands upon the people. Cluster I participants appear to be busy and are rather hard pressed to commit time to project activities. For people that are employed, often working overtime, and often being independent operators, committing long hours to working selling or providing a variety of urban services, time is

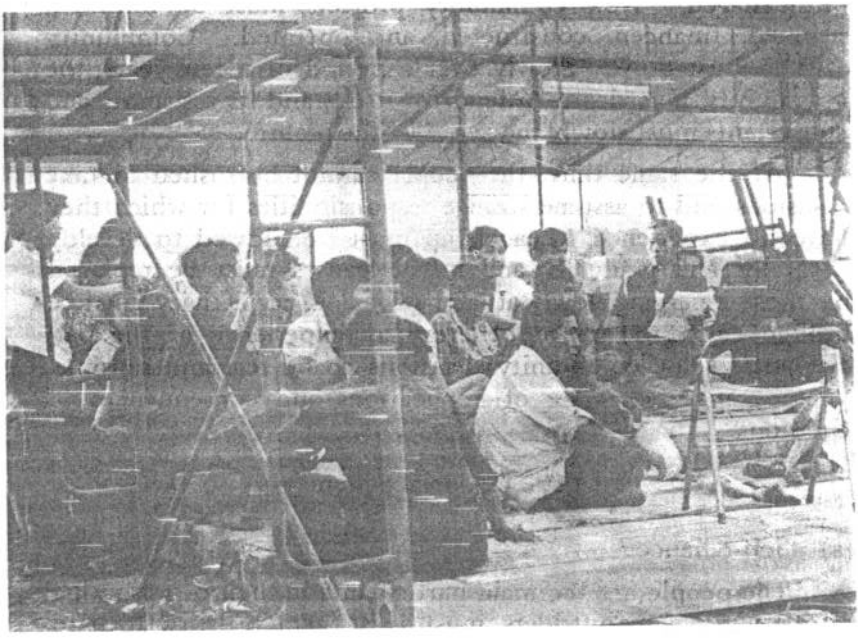
precious. At the same time they express a strong desire to complete the houses as quickly as possible.

It is estimated the time for construction will be 1,500 man hours per family. If only two members of the family worked for 20 hours each per week on the project the construction period will extend over nine months. This is viewed as too long a period. The people want and expect the houses to be finished in half that time. This would require four members per family working 20 hours per week, or fewer members working longer hours, the recruitment of outside labourers, or the participation of members from other clusters. It is felt, however, that the actual participation of family members in construction, rather than their representatives or their hired hands, is crucial for the success of this construction process in building bonds of community among the people.

Self-help activities usually take place on weekends. In Bangkok, however, most people work on saturdays, and only have sunday free. Sundays are not sufficient, however, and work during the evening must be included. In our discussion with participants, we initially suggested a work program which was divided into twenty hour modules. Each twenty hour module was made of three consecutive 4-hour evening work periods, and an additional full day's work on sunday. In this manner, one team of participants will work thursday, friday and saturday evening, and the whole of sunday, while another team of participants will work on sunday and on monday, tuesday and wednesday evenings.

This arrangement was deemed necessary for the process of mutual aid to be effective. In the mutual construction of houses, twenty families work toward the construction of twenty houses, and allocate the houses among themselves once construction is completed. This enables participants to divide the labour among themselves and to specialize in a few building activities. It, therefore, brings to bear the efforts of unskilled people into the construction of good standard housing. But if each participant is to be a member of a team engaged in one building activity for twenty houses, this implies that houses have to be built one after the other, in some form of an assembly line process. This requires one team to finish its job before the next team starts on the next construction task, which, in turn, requires each team to finish its task on time. In the discussion with members of the first cluster, it was found preferable to allocate tasks to teams, and allow them to arrange

Cluster I members share a meal during the education course.



Members of Cluster I talk over construction activities.

hours for themselves, with team leaders responsible for meeting the necessary deadlines.

The practical process of participation in actual construction needs to be further developed and experimented with before a system, suitable to the needs of the people, their morale, and their abilities, and at the same time amenable to efficient building construction, can be established.

(c) **Ongoing activities**

Participation in community activities develops over time and is subject to considerable fluctuations. For participation to be effective, it requires the gradual development of a structure of non-exploitative relationships, in which participants see and feel that one and all benefit from working and living together. A strong and legitimate community organization which can sustain a sense of participation based on equality cannot be built overnight.

As clusters get completed, relationships between clusters must begin to grow. Community projects must start and the community as a whole must begin to take responsibility for its future. The community must be maintained through the generation of community incomes. Community property must be managed. New community projects must be initiated, planned, financed, constructed, and operated. Community savings must grow. Slowly over a period of a few years, the community must learn to fend for itself, and its assistants and consultants must slowly move out of the picture.

At the same time, the people cannot be rushed to take decisions and to assume strange responsibilities for which they have no experience. Leadership must be allowed to develop naturally and gradually and initial leaders must be replaced by those emerging slowly at later stages. Every activity must be brought into the range of everyday experience of the participants. For community decisions to be real and sensible, people must be aware of implications and consequences of decisions.

8. The Financial Scheme

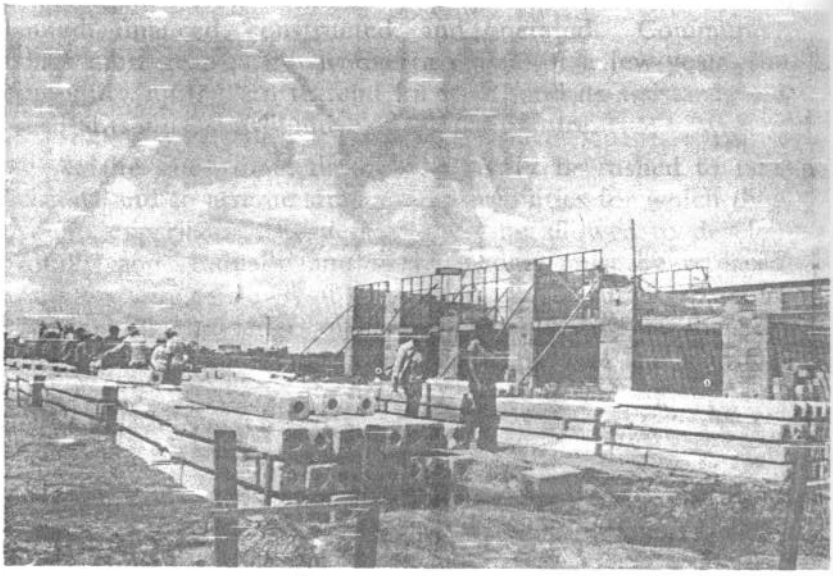
(a) **Self-reliance**

The people are the main participants in their own housing efforts and we, as outsiders, must assist them in their efforts to the extent that we can but without compromising their right

A participant does rebarring work for pile fabrication.

Another participant working on window frames.

Cluster I members beginning wall construction



Background: Cluster I members erecting their houses.
Foreground: Cluster II members prepare to begin piling.

and ability to think and act skilfully. Assistance must be tailored to the people's willingness to help themselves and not bestowed as a form of patronage in exchange for their loyalty or the creation of dependence. The aim must be self-reliance.

To build financial self-reliance, people must bring all their resources to bear on solving their housing problems. To help large numbers of people, real financial subsidies for families must be minimized and assistance must be limited to the type of assistance that the people cannot furnish by themselves.

The interpretation of this objective in the Building Together Project has meant that the people must pay for the houses themselves and that the Building Together Company must recover its funds for use in future projects.

The 200 low-income families that participate in the project are selected on the basis of their ability to pay which is not measured simply in terms of cash but in terms of labor skills and organization efforts. Each family will pay for the land, the building materials and the expenses of the Company in having skilled labour to assist them. Infrastructure costs will be paid for in the following way. When all the houses have been erected, the participants, together with the company will construct 15 middle-income shop-houses which will be sold on the open market. It is expected that the surplus from the sale of the shop-houses will cover the cost of the infrastructure. Thus the people, through building their houses and their community organization will earn the surplus value of the shop-houses which will cover the cost of the infra-structure without the need of a subsidy. There is, therefore, an element of cross subsidy in the project, and hopefully, the company will not gain or lose money on the project. If this arrangement succeeds, the company will not exploit the people and the people will not exploit the company.

(b) **Willingness and ability to pay**

People's ability to pay for housing is usually estimated at two years of household income, or 15–25 per cent of monthly household income. On a monthly basis, excluding prior savings, the ability to pay for housing of a family earning ฿ 2,500 per month ($ (US) 125) is of the order of ฿ 375-625 S (US) 18.75–31.25).

Willingness to pay for housing, on the other hand, is strongly related to the people's preferences. Moreover, willing-

ness to pay is a function of the real market value of the house being offered. People will be willing to pay more for a house if it is cheap in comparison to a similar house on the market.

The large majority of participants fall in the between the 30th and the 50th percentiles of the estimated monthly household income distribution for Bangkok, 1979, although a few who appear to have higher incomes have been admitted due to weaknesses in the present selection procedure.

Current housing expenditure information for participating families is incomplete, and for the 17 families for which data was available, the average was approximately ฿ 400/month.[7] Average household expenditures excluding housing, for 100 families for which data is available is ฿ 2,150. Since average household income is ฿ 3,100, we can assume that households can save more than ฿ 500/month on average. A considerable amount of their potential savings will need to go toward down payments and monthly payments on their houses.

Willingness to pay should be of a similar order. The majority of the 23 families who visited the completed demonstration house agreed that the cost and monthly payments were reasonable but until final contracts are signed, we cannot really establish their real willingness to pay. It appears then from our initial observations that the willingness to participate in the project is a direct function of the perception of the people that the price of the house is within their ability to pay, and that they are getting a house which will be worth considerably more than what they will be paying for it.

(c) **Terms of payment**

Terms of payment for houses must accommodate people's needs and resources, as well as the needs of the company and the requirements of the Government Housing Bank. The Government Housing Bank does not require any guarantees except the land titles and is willing to provide mortgage loans at 12 per cent interest given a 20 per cent down payment on the house. The company would prefer not to be involved in monthly payments and cannot under present Thai law, engage in hire-purchase schemes.

The people's level of present savings vary considerably and hence their ability to pay the down payment is low. We have thus adopted a shadow price for the people's labour, ฿ 6 per hour, for a total commitment of 1,500 hours per family. This brings the cost of labour to ฿ 9,000. The present

total cost of the houses is B 65,000, including labour. Twenty per cent of that is ฿ 13,000. If labour is counted toward the down payment, this will require the people to pay only ฿ 4,000 in cash down payment, which they have indicated is clearly within their ability to pay. At the same time, those that have larger savings can put those savings in the bank too, thus reducing their monthly payments. At 12 per cent interest per annum, the monthly payment for the house will be ฿ 636.24. The families that have larger savings, particularly those accruing from the sale of their slum house, can then take a smaller loan. This is illustrated in Table II.

Tabe II: Down Payments and Resulting Monthly Payments

Down Payment (Baht)	Amount of Loan (Baht)	Monthly Payment (Baht)
4,000	52,000	636.24
8,000	48,000	587.30
12,000	44,000	538.36
16,000	40,000	489.41
20,000	36,000	440.47
24,000	32,000	391.53
28,000	28,000	342.59

The Government Housing Bank does not provide subsidized interest rates for low-income housing, and therefore the payments of interest are substantial. Given the current rate of inflation in Thailand, however, the value of these fixed payments will go down considerably over the years. At the current rate of annual inflation, which is almost 20 per cent per annum, the real value of the monthly payments will be halved in four years. The ability to pay, however, will be expected to increase. Thus, while the payments will initially be hard on the people, they will ease over the years. The difficulty will arise if people are not able to meet payments for the initial period and are thus forced to sell their houses.

(d) Group Guarantees

One of the main interests of the people in the Building Together Project is in the ownership of house and land. While seeing the value of providing land tenure and house ownership,

it will not be in the people's long term interest to sell their houses and move back into the slums with their speculative gains. It will also harm the community, which again, instead of being stable and united, will turn into a community of transients. It is in the interest of the project, therefore, to prevent or discourage people from selling their houses shortly after they are built. It is difficult, at the same time, to prevent home owners from selling their property.

Since the sub-division of the site into individual plots takes a long time, and is a costly process, we have decided to leave the cluster in common ownership of the cluster group, with the option to sub-divide the cluster into individual plots at a later date. This will prevent, at least initially, the sale of houses to outsiders who have not participated in the building process. At the same time it will allow cluster families to get to know each other better, to overcome initial difficulties, and to get used to the monthly payments.

This is, of course, a potential difficulty, particularly because of the need for families to guarantee themselves. Since payments to the bank will have to be made jointly, each family will be responsible for all the other families' payments. Since the payments are a substantial part of monthly income, there may be difficulties. If this proves to be unfeasible, clusters will be sub-divided in the future to provide for individual ownership of plots. Alternatively, the Building Together Company, in conjunction with the people, will set up an emergency fund for meeting dificulties in payment and for insuring that the cluster meets its financial obligations.

(e) From consumers to producers

In short, the financial scheme adopted for the Building Together Project aims at transferring low-income people from the position of consumers of housing services to the position of producers of housing and other economic goods and services. In this process, a serious effort is made to cut unreasonable profits of contractors, developers, and speculators and provide access to building materials and processes of construction at their real cost. In the process of developing their housing cluster, the people are encouraged to learn building techniques and building skills which can later provide them with new means of increasing their incomes.

Houses are built with income generation opportunities in mind, leaving considerable space for workshops, shops, sub-

letting rooms, restaurants and the like. The community itself contains income generating properties, a deep well and a market, which could provide the needed community income for maintenance activities. Finally, the building materials factory which has been built on the site may remain on the site and provide a permanent source of substantial income to the community from the production and construction of houses in other locations once the project is completed.

Other activities, such as vocational training, education on access to loans for small businesses, involvement of government and non-government organizations engaged in improving income opportunities, increased contacts with small shops and workshops needing assistance and the like, may further increase the potential of the community to fend for itself and to enrich itself rather than to impoverish itself through the consumption of expensive housing. While the cost of the houses will seriously impinge on family budgets, economic activities within the household and within the community will be necessary to offset the increased cost of housing for the families.

9. Donor Support

Access to capital is usually controlled by strong interest groups whose institutionalized procedures are biased against low-income people in so far as they are designed to maximize profit and minimize risk. Thus the necessary experimentation and exploration of alternative financing schemes for low-income people is restricted. Hence the need for strong donor support which, at the same time, does not involve unnecessary restrictions. This type of support is hard to come by. There is a chicken and egg problem here. Once procedures and practices for alternative financing schemes are established, support is easier to obtain. But unless support is obtained first, the process of exploration needed to establish procedures and practices cannot take place. This situation of uncertainty calls for trust between donors and recipients. The privilege of making mistakes needs to be granted and this privilege is a heavy responsibility. The recipient is in the invidious position of trying, on the one hand, to address those funds to the indisputable and urgent needs of the poor and, on the other, to exploring thoroughly (and therefore imaginatively) new, more effective, lasting and meaningful methods for doing so. To achieve both goals it is necessary to chart a path of exploration that leads to the production of substantial quantities of housing for the poor.

It is easier to do this when donated funds are used as a revolving fund for future projects, rather than as subsidies to a small group of people who are being housed. In this manner, the donated funds can be used over and over again, helping more and more people. Subject to inflation, and other losses, revolving funds are a means of increasing the impact of capital in a self-reliant development process.

The Building Together Project has obtained such a revolving fund from Bread for the World, a Protestant Organization in Germany committed to assisting the poor in developing countries. This fund, totalling ฿ 4.5 million baht ($ (US) 225,000) was used to purchase land for the project, and to initiate infrastructure activites. The land and infra-structure is then used as a means for obtaining regular construction loans from the Government Housing Bank. The Netherlands Government funded the construction of infra-structure, will also be recovered and used in future projects as revolving funds. The build-up of revolving funds will thus strengthen the organization, and enable it to expand its operation.

The setting up of the Building Together Company was supported by Servicio Latino American Asiatico de Vivienda Popular (SELAVIP) which also funded the education course. The funds used in building the demonstration houses came from SELAVIP (for House I) and the Canadian Government (for House II). The The Canadian Government's CIDA funds have also provided salaries to the instructors engaged in the projects training course.

10. Comments from Workshop Participants

'The project is too reliant on complex organization.'

'The current inflationary trends will hurt the project.'

'Other technologies that are cheaper and impler should be explored.'

'Perhaps the cluster groups will be obstacles to the development of a unified community.'

'Existing contacts with people's organizations in the slums should have been exploited more.'

'It may be in the better interests of the community to retain ownership of some of the shophouses at the front of the site and run them as co-operatives.'

'The project needs to modify, its strategy to come up with cheaper housing for poorer people.'

NOTES

1. Khoman, Thiravudh, *The Magnitude of the Squatter Population of Bangkok* AIT Special Study No. 94 1974, pp. 21-22.
2. Fundacion Salvadorena de Desarrollo y Vivienda Minima, *Evaluacion de Proyectos Habitacionales* En El Salvador, San Salvador, 1976.
3. Etherington, A.B., "Eco Settlements: Optimising Social, Political and Physical Resources for Community Development", in *Low-income* Housing Technology and Policy, Vol. 1. AIT, Bangkok 1976, pp. 347-362.
4. Santayanondh, Weerayudh, *Design, Construction and Evaluation of Prototype House for Aided Self-help, Low-income Housing in Bangkok,* AIT, Thesis August 1979, pp. 34-36.
5. Alexander, C. et al., *The Production of Houses* (manuscript), 1976.
6. See Fundacion Salvadorena de Desarrollo y Vivienda Minima.
7. See Santayanondh, Weerayudh, pp. 146.