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Constraints and Opportunities
in Providing Water and
Sanitation to Spontaneous
Settlements

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CONSTRAINTS AND OPPORTUNITIES IN PROVIDING WATER AND SANITATION TO SPONTANEOUS SETTLEMENTS

This project is being submitted to satisfy part of the examination requirements for the Diploma in Community Water and Sanitation at WEDC, Loughborough University of Technology.

The main purpose guiding the choice of topic was that the author intended to familiarise herself with an area of development work in which she plans to work in the future. Due to the shortage of time available this investigation will necessarily be limited in scope and depth and in the number of books relevant to the topic which have been consulted. It is thus merely designed to give a general idea of the types of constraints and opportunities existing in this field rather than a comprehensive and detailed account.

I. INTRODUCTION

Sketching out the Problem

Since the 1950s Third World cities have witnessed a dramatic increase in their population a large proportion of whom find themselves at or more often below subsistence level in extreme poverty in slums and shanti towns with high rates of morbidity and infant mortality. In many cases between 40 to 50 percent of the urban population live in such settlements (Bell 3.5.88 lecture). In some cities this figure is closer to 80 percent.

Percentage of Population living in Slums and Spontaneous Settlements in Third World Cities

Brazil	Rio de Janeiro	1970	30%
	Recife	1970	50%
Peru	Lima	1970	40%
Venezuela	Caracas	1970	40%
Sth. Korea	Seoul	1970	30%
India	Delhi	1970	30%
Malaysia	Kuala lumpur	1971	37%
Pakistan	Karachi	1971	23%
Turkey	Ankara	1970	60%
Nigeria	Ibadan	1970	75%
Morocco	Casablanca	1970	70%
Camerron	Douala	1970	80%

SOURCE: UNCHS, 1976 and Mabogunge, 1978

This trend is due primarily to two main factors. Firstly, as capitalist relations of production with its concommittant patterns of capital accumulation and consumption penetrate the economies of developing countries the cities become the centres of employment opportunities due to large scale industrialisation. Survival in the countryside, on the other hand, for the majority of the population is becoming more and more tenuous with prices for staple diet crops being kept delibertely low by governments who prefer to exploit the

peasantry in favour of potentially dangerous city populations. The problem is exacerpated by other factors such as drouoghts (and other natural disasters) and land wars (landowners vs. peasant farmers) which can contribute to making an already precarious existence unviable. Hence large numbers of rural people migrate to the urban districts seeking and often finding a relative improvement in their living conditions. The second factor contributing to the growth in urban population is due to the natural increase in these populations resulting from high birth rates.

This trend is increasing, at present the average annual urban growth rate is estimated at 4 percent (Narine 86:106f) or 5 per cent (Bell 3.5.88 Lecture) such that by the year 2000 approximately 44 per cent of the Third World's population will be living in urban agglomerations 50 per cent of whom will be crowded into slums and squatter settlements (Donohue 1982). As the urban economy did not expand at a fast enough rate to accommodate this population increase it generated unprecedented pressure on the existing social services which the authorities found themselves unable to cope with. Unemployment, overcrowding, inadequate housing, water supply and sanitation and the lack of health facilities are the enormous problems faced by planners and politicians in the developing world (Narine 86:107-108). In India more than half of urban households share a single room, the average occupancy being 4.4 persons per room (Rosser 1972), in Bombay 77 percent of households with an average of 5.3 persons live in one room (Misra 78:375-376), many are completely homeless. The statistics regarding services are equally grimm. In Djakarta 76 per cent of houses had neither water nor electricity in 1969 (Oliver 73:6). In Cape Coast, Ghana 73 per cent of houses lacked water and 25 per cent had no elelctricity (Hindrenk and Sterkenburg 75:293). In Calcutta 77 per cent of families share lavatories with other families and more than 10 per cent have no facilities (Lahini 78:43-72).

These poor populations gathering in the cities in search of work and means of survival crowd together in slums and spontaneous settlements (squatter settlements, favelas, basties etc.). Slums are usually situated in the anscient core parts of the cities with an old crumbling and decaying housing stock and low service provision with high occupancy of very limited space (often rented from rackrenting landlords). The definition of spontaneous or squatter settlement is less straightforward. Most commentators agree upon 'illegality' and unordered origin as the most distinguishing characteristic of a squatter settlement (Gilbert81:87, Bell 3.5.88 Lecture). In fact the category of illegality applies to most aspects of the squatter's life: - the illegal occupation of public or private land by organised invasion or accretion and the subsequent erection of a dwelling on such land disregarding building and planning regulations, often public services are tapped clandestinely, dwellers' work is often characterised by its illegal nature, they run unlicenced taxis, busses, engage in unregistered trading money lending, etc., they work in illegal workshops without health and safety standards, often their childrens' birth is not registered who in turn get no schooling and start work too early (McAuslan 85:114-115). Other defining characteristics of spontaneous settlements concern type of housing and services. The original dwellings are constructed by the family through self-help or with the help of neighbours with makeshift materials. Furthermore, when the settlement was first

formed most of the infrastructure and services were lacking. The fourth defining characteristic cited by Gilbert is that spontaneous settlements are occupied by the poor (Gilbert 81:87).

This essay is primarily concerned with the second type of settlement of the poor since spontaneous settlement by invasion or accretion is a problem which is rather more pressing in terms of its magnitude and is circumscribed by economic, legal and political constraints which differ from those operating in the slum.

While the rate of urban growth in developing countries averages 5 per cent (doubling the population within 25 years), slums and shanties often grow at 10 per cent per annum (Bell 3.5.88 lecture). The responses to this critical growing problem of large scale urban poverty in terms of outsiders' opinions among government officials, academics, planners and the public at large varies (according to their respective group background) and ranges from paternalist acceptance of poverty as a preordained ineradicable part of the world order to a liberal 'welfareist' view of poverty to be treated by charity to be given from those who have to those who have not, a view also supported by the traditional religious approach (esp. Christianity and Islam) to charity which seeks to maintain a stable relationship of dependence between rich and poor. At the left end of the spectrum of opinions and attitudes the radicals and self-styled revolutionaries of the intellectual fringe groups expect the masses of the poor to take on board their idea of revolutionary struggle against the ruling classes, such that the poor would become the footsoldiers in a war strategically planned and conducted by the vanguard intelligentsia (see also Bakhteari 87: Chapter 2). What all these attitudes have in common is that they are those of 'outsiders' unable to overcome the social distance which separates them from the urban poor and renders them incapable of seeing the world as it is experienced and interpreted by the poor.

> "Policies with respect to squatters and slumdwellers are made by the dominant groups in society. They reflect the social origins of these groups, Their current economic interest, their interpretation of their own needs and those of the nation."
> (Bakhtesri 87:47)

They regard the poor settlers as parasitic and as a burden to the rest of society, as an increasingly pressing problem of the marginal and the deviant threatening the 'normal' majority of society. As their numbers grow the fear of their discontent assumed to lead to political radicalisation grows too (Bakhteari 87:27-29).

On the practical side the responses of governments and authorities underwent a progression of stages beginning with a non-policy of neglect of the problem when it was thought that it would go away by itself once the lagging economy had adjusted itself to absorb the surplus population. Later with increasing urgency, depending on conditions in individual countries, other measures were taken, such as restriction of urban access to rural immigrants (a pratice still used in South Africa), zoning laws restricting immigration to certain parts of the city, and, ultimately eradication of squatter settlements by demolition accompanied in some cases by attempts at rehousing (Bakhteari 87:35-43). Expulsion and bulldozing on its own merely dispersed the squatters temporarily and they usually returned to the original sites very soon reconstructung their

dwellings. Rehousing, however, proved not a viable solution. Firstly, because due to the capital expenditure required, the building programme remained extremely limited when compared to the vast number of those who needed housing and, because housing built to official government standards, developed for the housing of the better off, remained out of reach of the poor populations due to its high cost ((affordability) (Gilbert 81:108-109; Narine 86:110; Macedo86:240; Bakhteari 87: 85,86). The upshot of this attempt at rehousing was the same as that of simple expulsion: the poor finding themselves unable to make the higher repayments often sold their entitlements to middle-class people and returned to the old sites. What these attempts at solving the prblem overlooked or disregarded was the capacity of the poor to provide their own housing, because it did not correspond to established building codes and practices. It was not until the 70s when it became obvious that governments could not or would not provide the resources for housing and integrating the urban masses in terms of traditional housing policies that the possibility of letting the poor take care of their own housing needs though aided self-help projects began to be discussed as a serious option by some governments and by the international aid agencies in particular. Community Participation (CP) became the new catch phrase. The HABITAT Conference of the United Nations (1976) suggested that public participation should be an indispensable element in planning, implementation and management of human settlements. The same idea was taken on board by the World Bank, by the other main international aid agencies and by many academic commentators (Gilbert 81: 104; Narine 86:113,116; Bakhteari 87:88) and by a large number of academic commentators (Macedo 86:240). The underlying idea was that the poor, rather than be dependent on government and other outside agencies, provide for themselves housing and other services, with some financial help and technical assistance coming in from outside the community, i.e. the poor community is expected to co-operate and participate in the reconstruction and improvement of their lives. In this spirit many Third World governments, having come to the conclusion that the problem of spontaneous settlements in their cities could not be dealt with by expulsion or state provision of housing, began to adopt policies of implicit (toleration) or explicit (legalisation) recognition of some of their urban squatter settlements. In practice this implies one of two strategies. The first one is a new form of rehousing, the site-and-services option, where the authorities select a vacant site, usually at the periphery of the city, which is prepared and provided with a certain level of infrastructure, then handed over to the squatters to build their own dwelleings and services usually with some form of material or financial (loans) assistance from outside. Unfortunately this strategy proved often unsuccessful because the siting of spontaneous settlements in the more central areas of the city close to the places of work and volatile work opportunities is in most cases a primary requirement for the poor population's survival. Another common reason for failure is that site and services schemes also tend to be quite expensive. Hence as a solution to the problem of urban poverty they often ignore the economic needs of the poor (Gilbert 81:103-107; HABITAT 86:18-25; Bakhteari 87:43,82; Bell 3.5.88 lecture). The second available government strategy directed at solving the problem of the urban poor is that of 'upgrading' existing settlements, i.e. providing existing communities with basic infrastructure and with financial and technical assistance for improving their housing and living environment by means of

a   self-help schemes. On the whole this approach has had better
     results as it tended not to disrupt the existing social networks of
     neighbourhoods and avoided the problem of dislocation in terms of
     access to the formal and informal labour market (Bell 3.5.88
     lecture; Bakhteari 87: 89-90).

This dissertation, which is intended to investigate the constraints
and opportunities in the provision of water and sanitation to
spontaneous settlements, proposes to adopt the above idea that
community participation (CP) is the major underlying 'opportunity'
which will work in favour of the urban poor in their endeavour to
gain personal and communal autonomy and to take charge of the
satisfaction of their own needs. Most of the literature on
participation and the urban poor which has been consulted for this
purpose concentrates on the question of housing as the major
problem, however, this is not a serious drawback as the factors
influencing CP are general ones which operate in much the same way
in the sector of water and sanitation provision. In the first part
of this investigation we will therefore mainly be concerned with
some of those constraints ant opportunities which affect CP in
general. Only in the last section will a few of the specific
problems arising in the context of water and sanitation be
addressed. But before considering the actual constraints and
opportunities in CP identified by some of the authors who have done
work in this field let us take a closer look at what the term
Community Participation means to different people.

CHAPTER 2
The Meaning of Community Participation from Different Points of
View

   "The term community development has come into international usage
   to connote the process by which the efforts of the people
   themselves are united with those of governmental authorities to
   improve the economic, social and cultural conditions of
   communities, to integrate these communities into the life of the
   nation, and to enable them to contribute fully to the national
   progress."(UN 1956)

This is an early description of the purpose of what we would
nowadays call community participation. However, today, 32 years on,
such a harmonistic statement appears problematic to say the least.
The role of government intervention in the life of poor communities
and the relationship between government and the masses of the poor
in general has turned out to be a major focus for disillusionment
and contention. James Midgeley (1986) devoted an entire volume to
just this relationship and to the investigation of the various
conflicting schools of thought ranging from those who
unconditionally advocate state - community cooperation, or those
who propose to byepass the state with the help of powerful
international NGOs (Midgeley 86:153-157) to those in the anarchist
camp who would advocate complete separation of state and poor
communitiies. Midgeley himself in his concluding evaluation of the
situation recommends to the poor communities a realistic strategy
of learning the art of manipulating the mechanisms of the state to

get support by a combination of conflictual and consensual elements in their struggle for the improvement of their existence (Midgeley 86:159).

From this we can easily see that CP means different things to different people. As Midgeley points out the actual responses of Third World governments to CP in community development can be classified according to the following typology:

1. total suppression
2. active promotion
3. manipulation of CP programmes for its own ends of social contr‹ through co-optation (see also Macedo 1986 conclusion)
4. Vaguely formulated poorly implemented policies on CP, haphaz‹ inadequate, conditional provision of finance, staff and resour‹ often mere lip service to the idea of CP, does not seek suppress but fails to provide adequate support.

He calls them anti-participatory, participatory, manipulative and incremental modes respectively. He suggeststhat the majority of governments pursue policies belonging to category 4, while many of them adhere to a typical mixture of categories 3 and 4. Midgeley argues that on the whole state support despite being often inadequate has been beneficial for CP in development programmes (Midegeley 86:147-148). Many governments have taken on board the idea of CP because they expect from it economic advantages. Firstly, they expect the cost of urban improvement programmes to go down because the dwellers in CP programmes will bear the lions share of the development and construction costs since it is part and parcel of the principle of CP that participants will benefit from assuming responsibility for their projects including financial responsibility. It should, however, be noted that the belief in the reduction of costs to outside agencies is not always borne out by the facts, since the neccessary input in terms of community education, technical advice and training in the much prolonged initial demonstration phase of a genuine CP project may well outweigh the benefits expected from the transfer to the community of land, labour and material costs (Franceys 27.5.88 lecture). The second economic reason why governments often propagate the idea of CP as guiding their policies is due to the fact that many donor countries and agencies nowadays make loans dependent upon CP in urban development programmes.

However, many governments view CP with suspicion and fear because they suspect that CP will enhance the power and political awareness of the masses of the urban poor and through its subversive effect will pose a challenge to their authority (Narine 86:117; Yeung 86:11). The critical problem of regularisation and legalisation of spontaneous settlements, far from being merely a question of protecting the sanctity of property against violation from the urban poor (Linden 83:258), derives much of its salience from the fact that legalisation greatly enhances and consolidates the political power of the poor. This power, once brought into being has to be 'managed' and 'cultivated' by the state (e.g. through co-optation of leaders, divide and rule favouritism, etc.) and can also be exploited by party political strategies (votes through promises and favours). It is hardly surprising, therefore, that in many cases governments seek to reap the expected economic benefits from CP while trying to contain the perceived political threat. It should be noted, however, that some authors deny the reality of

such a threat. They argue that the urban poor on the whole have petit bourgeois objectives of prosperity and are quite unconcerned with official radical politics (Bakhteari 87:49,64; Lloyd 79:179).

> "They organise themselves on a need oriented basis and respond to state actions 'positively' by reorganising and reconstruct from the 'fall out' effect of state action without confronting it...most of the time they are involved in creating, constructing, manipulating, lobbying and organising to improve their environment...they make use of any opportunity or loopholes present in the outside system."(Bakhteari 87:49)

However, what is crucial in this context is not the actuality of the threat but the perception by governments of its existence. For this reason CP is often redefined by goverments as meaning something else, i.e. something useful and less threatening (Yeung 86:11). It usually is redefined to mean the dwellers' contribution of labour to the construction process to cheapen the project and to obtain foreign loans tied to CP. The state authorities and professional planners, on the other hand, take over the entire process comprising planning, design, implementation, cost recovery and maintainance. Macedo, for instance cites the example of a self-help housing project in Joao Pessoa, Brazil, which was initiated by the state. It brought together previously unconnected residents who, without prior organisation, had no potential to confront the state with their own demands. They were expected to contribute 780 hours unpaid labour to reduce costs, the benefit of which if not completed in full would be lost to the participant. The prospective residents were not consulted as to their needs and preferences, the whole project was imposed from above (Macedo 86:112-113). This is an extreme example of agency directed CP and the scope granted to the involvement of the community in the project can vary from country to country over time. However, it only rarely includes the people at the selection and planning stage and at the final stage of project evaluation. It is more common to involve the community at the implementation stage, i.e. when all the important decisions are already made (Franceys 27.5.88 lecture).

The idea of CP as entertained by international funding agencies and by most academics writing on the subject is a very different one. CP from this point of view is understood as the giving of power to the people (Franceys, ibid), as involving the community in all aspects of an upgrading or site-and-services resettlement scheme, ideally beginning with site selection and/or project planning and finance, design options, implementation, cost recoverty and operation and maintainance and leaving to the outside agency only a limited role of providing a context conducive to community self-help. This means, in practice, providing security of tenure (legalisation), technical advice and help in acquiring small loans and cheap building materials (Bakhteari 87:303).

When it comes to the goals Cp is expected to achieve we can find two more or less distinct schools of thought, one instrumentalist (i.e. conducive to other desired results), the other idealist in its objectives. The instrumental school is best represented by the World Bank:

1. CP is neccessary to maximise the health benefits of a scheme
2. CP is essential for effective operation and maintainance

3. CP can result in cost savings to the agency
4. CP in a water project can improve the community's ability to undertake other improvements on its own.

(source: Franceys 27.5.88 lecture)

Yeung, adopting the government's point of view, suggests that CP can reduce the overall costs of social transfers giving the government greater flexibility in its development options; that, secondly, people based programmes can provide the government with information regarding the social and economic needs of the population without costly data collection because such information would flow upward naturally; and that, thirdly, CP through participatory self-organisation would help in identifying potential future leaders who could assist in the development process and in the dissemination of government communication. Adopting the point of view of the poor Yeung suggests that CP may provide urban services which would otherwise have been unavailable, that it may provide residents with employment opportunities and that it may create a sense of neighbourliness (the latter being somewhat less instrumental a justification than his other items (Yeung 86:11). One might summarise the primary concerns of the instrumentalists thus: as there is not enough money available to achieve a 100 per cent coverage of the poor in terms of housing and other essential services CP by transfering some of the costs to the users allows for a greater spread of scarce resources. Furthermore, CP ensures that the benefits of projects are perceived by the users which in turn guarantees their success and future maintainance. Whyte, on the other hand, although fairly instrumental in her evaluation nevertheless also expects CP to be an end in itself, to have intrinsic value insofar as it promotes greater community solidarity and cohesion through cooperative behaviour and joint decision-making (Whyte 84:223.238-239).

The idealistic school of thought is well represented by Bakhteari. It tends to see CP in terms of the intrinsic benefits of its capacity to develop the spiritual, ethical potential of participants towards personal growth which includes the dimension of community. In other words, CP is primarily seen as a learning process with the potential to empower individuals and their communities in a non-material sense in the direction of personal and communal autonomy/self-reliance and progress in interpersonal relationships (Bakhteari 87:2,5,99). Other more material and practical benefits tend to be seen in terms of this wider ideal objective. Gaining control over the practical needs and circumstances of their lives is viewed as a means towards other higher objectives (Bakhteari 87:96-98). This underlying ideal of moral/spiritual development and progress as the primary aim of CP is apparent in the following quotation which imputes to CP far reaching national and global consequences of a fundamental political nature:

"People can create local solutions to global problems by taking charge of the process of problem solving and by changing their values and behaviour in the process in response to today's economic and social conditions. These social actions will lead them toward shaping a more participatory and self-reliant society. When people lack confidence in their ability to deal with the economic and social issues that confront them they are easily tempted to turn over more of their rights and

responsibilities to authoritarian political movements and to elites who promise quick solutions to complex issues."(Bakhteari 87:3).

She stresses, however, that this type of politicisation through peoples' involvement in healthcare, education, sanitation is a new kind of democratisation process which does not lead towards violent political revolution but which represents a 'silent revolution' based on people organising and helping themselves (Bakhteari 87:6). Bakhteari thus views CP as the underlying opportunity to achieve progress on a personal, communal, national and global scale (Bakhteari 87:96). The constraints in her account emanate mainly from outside the community, from the inability or unwillingness of government authorities, professional planners and development agencies to recognise that community development cannot come from the top downwards, that it can only grow as a result of a slow gradual process which has its roots in the existing organisation, practices and skills of the community itself. Her argument is that no one can develop anyone else and that therefore the customary top-down approach of the outsiders with its social distance resulting from inflexible bureaucratic procedures, lack of understanding and prejudice regarding the moral and psychological incapacity of the poor is doomed to failure (Bakhteari 87:1,2,8,35-36,83,298-300; Narine 86:116).

This summary sketch of what different people understand to be the meaning of CP would not be complete without at least a brief mention of the left wing critics of the principle of CP as such. As Narine notes the 'founders' of the CP self-help school of thought in community development were Turner and Mangin whose main proposal was that 'housing by the masses'with CP was a more viable strategy in solving the problem of urban poverty than 'mass housing' with direct government control. This position was criticised by Drakakis-Smith (1981), Dwyer (1975) and Burgess (1979) who all feared that the great mass of low income urban population would end up more deprived than ever as a result of such self-help strategies which they thought would encourage government neglect on a large scale. Burgess suggested that the idea of CP had been invented by the apologists of capitalism and was designed to perpetuate exploitation and the class system (Narine 86:114). Midgeley, who on the whole does not embrace such a radical position also addresses a critical remark to the 'ideology of community participation' and its attendant paternalism typical of western middle-class professionals. He suggests that the people's own idea of CP may well demand the sharing of benefits already enjoyed by others in the society.

"Why should the poor be required to construct their own schools and clinics while the wealthier sections of society have access to state provision?" (Midgeley 86:158)

The scholarly contributions to the subject of CP were found to fall into two categories which possibly coincide more or less with the earlier dichotomy of the instrumentalist and idealist schools of thought. The first one is the larger of the two and is perhaps best described as the traditional no-nonsense 'stiff upper lip' sociologist. The following quotation depicts him perfectly:

"The whole structure in which slum upgrading is to be executed
has more of the characteristics of a jungle than of a conspiracy
of the devil. No doubt, the laws of the jungle are not very
conducive to the execution of human rights. I have tried,
however, to discover that there is some system in the jungle.
Once we know under what circumstances the jungle flourishes, and
how it grows it might also be possible to stop its growth or
attack it - for those who want to." (V.d.Linden 83:259)

This type of sociologist is above all concerned to expose the
constraints which in their complexity and sheer tenacity seem to
make the whole enterprise of CP well nigh impossible.

The other type of contributor is more of an idealist and, to the
traditional sociologist, appears somewhat 'unscientific'. Again
this type of contribution is best represented by Bakhteari and also
by Moser and Chant, the researchers of 'The Role of Women in the
Execution of Low Income Housing projects'. Although also concerned
with the identification of constraints they are first and foremost
~~interested~~ interested in the opportunities and potential of CP as a
tool for achieving something of a 'quantum leap' in the history of
human relations on the personal communal and global level. In both
cases the role of women was crucial to the achievement of this
goal. What is also typical of the above authors is the proposed
activist involvement in the community. Bakhteari makes a case for
'action research' or 'action anthropology' for combining social
theory with committed practice in dialectical fashion (Bakhteari
87:103,178-182). Similarly the HABITAT publication (Moser and
Chant) is a training module for women community workers.

The traditional sociological approach, although indispensable for
charting the manifold real constraints to CP, has to date not made
much of an impact on that jungle which it purports to attack. This
is perhaps because the knowledge of existing constraints upon human
agency and the reporting of such findings in scientific journals is
on its own not enough to effect real changes. Sociologists, in
order to make a difference need to concern themselves just as much
with the empowering liberating potential of human agency and they
need to direct their efforts at identifying and enhancing this
potential. Action research and community involvement would on the
whole be more suitable for this task.

The following chapter will briefly examine some of the constraints
to CP presented mainly by the first type of contributor. The
subsequent two chapters will look at CP as a fundamental
opportunity from the viewpoint of the second typ of contributor.
The last chapter will deal with some of the constraints and
opportunities which arise specifically in connection with the
provision of water and sanitation in squatter settlements.

Chapter III
The Political Reality of Community Participation

If we define the 'political' as having to with particular interest then the chief obstacle to CP is undoubtedly political and it operates both at the local and the national level. We should perhaps begin by asking the questions: what is a community? andwho participates? Because if we look at the community with the cold dissecting eye of the social scientist it becomes immediately obvious that we cannot realistically entertain the idea of CP in the purely emotive harmonistic and wholistic meaning which is often presented to us by its proponents. The squatter community is not a homogeneous collection of like minded individuals always pursueing the same objectives. It contains overlapping groups with divergent often conflicting and cross cutting interests operating against CP: ethnic groups, clans, families, men and women, the old and the young, the very poor the not so poor and the relatively well off, as well as owners and renters. In practice such groups may participate in development projects for different reasons and in different degrees. For instance, those with the greatest influence in the community usually do most of the 'participating'. They are the most vocal, often have a higher level of education and they are also usually the better off who can control and manipulate the less powerful individuals and sections within the community. Their interest can be different from that of the poorer majority (Whyte 84:237).

That this is so can be illustrated with reference to the principle of legalisation or regularisation of squatter settlements. The formal recognition of settlers' rights is often presented as an indispensable prerequisite of CP and development, i.e. people won't be motivated to improve and invest in their housing and services without the security provided by it (Reed 27.5.88 conversation; Macedo 86:141). This undoubtedly true in most situations at least with regard to some form of informal recognitions. When it is a question of legalisation, however, there is evidence that in some cases there are groups within the community who stand to loose from legalisation. Peter Ward found in the case of Mexican sponaneous settlements, for instance, that those who pay rent as opposed to those who 'own' their dwellings fear legalisation as this would put up the value of the properties and hence affect the level of their rent. Linden notes that in some cases legalisation was not desired by the majority of basti dwellers if they already enjoyed a fairly high degree of perceived security through informal recognition. For them land titles would merely have resulted in their having to pay for land and development costs, instead their priority would have been the provision of services as these in themselves imply regularisation. On the other hand, those at the top of the social hierarchy in the settlement (often the leaders) and the middle men in some type of bastis can have divergent interests. The Leaders preferred legalisation but without improvements. If legalisation without improvement was granted this would have kept the leaserates for their often very large plots low. Later after legalisation they could gradually pressurise the authorities for necessary services, this would preserve their powerful position which would weaken once all of the settlers' objectives had been achieved. It is in their interest to perpetuate the dynamics of negotiation between state and community rather than serve the interest of the shanti dwellers. The middle men in certain types of basti, too, were more

interested in legalisation than services because the prices of the plots held in reserve by them for commercial purposes would rise as a result (V.d. Linden 83:252-253,257; Yap 83:203).

On the whole the commentators tend to agree that one of the major obstacles in the way of CP is the community leadership. A common complaint is that leaders do not articulate the real needs of the majority of poor settlers, that, in effect, they disrupt or distort the flow of information between government authorities and dwellers and never provide the people with the true facts (Yeung 86:259; V.d. Linden 83:258, Bakhteari 87:297). Another complaint is that there is a strong tendency towards competition between leaders, often within the same community, each with his own group of followers confronting each other whenever possible (V.d. Linden 83:253). This surely indicates that they are not representative of the masses of poor dwellers. We can see from this short excursion into the 'real' community that, as Whyte points out, CP indiscriminately encouraged does not necessarily lead to greater democracy or social justice but can, in fact, reduce or intensify the level of equality and solidarity. CP may or may not strengthen the power of groups who are already most articulate, literate, rich and traditionally accepted as leaders (Whyte 84:237). She suggests that, as a minimum requirement, the benefits of projects should be equally distributed while the optimal objective would be the equal distribution of opportunities for leadership and responsibility (Whyte, ibid).

Looking at the constraints to CP 'outside' the community it is useful to return to the central concept of illegality assuming that in general legalistion encourages participation (investment of time, effort, resources). One might say that the city is divided into a legal 'normal' sector, comprising commercial, industrial (formal economy) and 'respectable' residential areas, and a very large 'marginal' illegal sector contained within the slums and shanti towns. The answer to the question as to why the illegal city persists is that the legal city benefits enormously from its existence (Gilbert 81:110; McAuslan 85:114). Who benefits? Firstly, landowners and estate agents sometimes subdivide and sell plots to the poor, in itself a legal transaction which leads to illegality when dwellings are erected without planning permission. Landowners have also been known to deliberately engineer invasions on their land in order to collect high compensation from the government. Secondly, commercial and industrial enterprises depend for their profits upon cheap labour from the shanti towns for services or subcontracting. Wages and pay can only be kept so low because housing costs are so low (reproduction of labour power). Thirdly, the absentee landlords, who extract high rent for little or no maintainance and services, benefit together with their political protectors up high. Fourthly, officials in higher positions often receive bribes for not enforcing the law. Thus, inaction and tolerance on the part of the authorities is not necessarily a sign of a weak government or of local administration (Bakhteari 87:41). The fifth category of beneficiaries are the politicians who nearer election time can draw mass support for promoting the issue of legalisation or for providing some much needed service to a spontaneous settlement (e.g. piped water, or a school or health centre)(McAuslan 85:114-115).

It is the politicians and the stultifying patron-client relationship between them and the poor urban communities which is often said to be one of the chief obstacles to effective community

action. The key issue is again legalisation: as long as the
settlement is illegal the dwellers depend on the politician's
protection against eviction and on their favours for some piecemeal
reform. This patron-client dependency is crucial for the politician
whose career may depend on the massive vote from the urban poor.
Yap reports that in the 1970-1975 upgrading of Lyari katchi abadie
(Karachi's oldest squatter settlement in the city centre) was a
friendly gesture on the part of the then ruling Pakistan People's
Party (PPP) towards its loyal supporters, well organised and well
established in Lyari (Yap 83:193). He suggests two ways of breaking
the stranglehold of the politicians upon the community. Firstly, in
institutional terms, the establishment of an independent 'community
assisting organisation', such as might be provided by the Jaycees
(Pakistan's Chamber of Commerce), well known for their high ethical
standards. This body might overcome the problems of communication,
information, planning, etc., created by the devious strategies of
middlemen and politicians (Yap 83:267f; see also Linden 83:259).
Secondly, he proposes to work towards regularisation/legalisation
and improvement of katchi abadies as this will deprive the
politicians of their power base in the communities and liberate the
dwellers to participate on their own terms (Yap 83:264). From this
we can see that the recognition of the legal rights of the urban
poor is not simply a means to improve living conditions but has a
greater significance insofar as it defines the rights and duties of
all those involved in the process of community development (V.d.
Linden 83:259).

Although the state authorities can sometimes not be neatly
separated from the domain of party politics it is useful to
distinguish this sector for analytical purposes as the state is
formally in charge of policies related to the problem of low income
settlements. Contrary to popular belief the state is not a
homogeneous entity. It may manifest itself at the regional and
local level in a bewildering array of competing institutions, one
seeking to outbid the other for power and influence. Macedo reports
an instance in João Pessoa, Brazil, where two official institutions
in charge of housing the urban poor pursued conflicting policies in
accordance with different political interests at national and local
level. One of them was involved in favela upgrading, the other,
more powerful one sent the bulldozers into the same settlement
(Macêdo 86:97-99,244-245). Yap reports from Pakistan that the
confusion of institutional authority was so great after the 1977
military takeover that it completely prevented the involvement of
residents in improvement projects since the strategic planning
department was without any clear authority to have their decisions
endorsed at higher levels of government (Yap 83:203). Such blatant
discord between government institutions, however, would seem to be
the exception rather than the rule. In normal times power relations
within the state apparatus tend to be more stable and clearly
defined. Under such conditions the policies of the state agencies
towards the urban poor are more consistent and predictable: they
aim at control. One major strategy of control can be the state's
refusal to permit legalisation or regularistion. The state is
usually quite happy to tolerate the illegal settlements which
accommodate the masses of the poor since this legallly justifies
any kind of action the authorities may wish to take. The insecure
position of the settlers is deliberately maintained as it gives the
state a great deal of control over this population who always live
in fear of law enforcement. As long as some law is contravened the
squatters are in weak position (Bakhteari 87:41; see also Gilbert

81:110-115). As a result of his experience in Karachi V.d. Linden
concludes that it can be in the interest of the government
authorities to thwart any systematic attempt at settlement
imprcvement and CP in which the procedures are fixed and
streamlined, that the rights of dwellers are kept deliberately
undefined because it gives to authorities or to individuals within
them greater power and discretion (V.d. Linden 83:254). Hence this
policy of restricting the control which settlers want to achieve
over their own lives does not only apply to the principal issues of
legalisation but to anything which might lead to routinisation,
definition and regularity of any kind and which imply a shift in
the balance of power between the poor and the state.

The second main strategy of controlling the urban poor tends to be
deployed by the state under the specific historical and political
conditions of populist government when the state needs the mass
vote of the urban poor in order to legitimise itself vis a vis
other powerful groups and classes in society. Under these
conditions the state has to resort to more indirect means of
keeping the masses under control, i.e. to a new patron-client
relationship and corporatist pattern of organisation. CP is here
often used by the state agencies as a double edged strategy: on the
one hand, to harness the energies of the people for solving
pressing economic and social problems incumbent upon the state, on
the other hand, CP is used as a means of social control. It is used
as a means of deflecting opposition through state patronage and
concessions in service provision, through co-optation of community
leaders, through creating vertically organised corporatist
residents' associations from above so as to prevent horizontal ties
of interrelationship within the community, through favouritism
along the lines of 'divide-and-rule', i.e. destroying the fragile
political solidarity amongst dwellers by means of piecemeal land
distribution and incorporation of the beneficiaries into state
agencies (Macedo 86:116, 122,241,246; Narine 86:117,124).

In view of the apparently insuperable odds stacked against CP as a
viable method to achieve substantial lasting results in terms of
liberation from economic and political dependence we might ask:
what is the point of continuing to promote it? Looking at the
situation under conditions of populist government one may well
argue that the poor have at least their vote as a bargaining
counter to achieve a relatively higher level of service provision.
The same would be true in any situation where politicians hold the
key to existential security and some service provision by virtue of
the patron-client system. An yet under these conditions there can
be no real progress in terms of the urban poor gaining control over
their lives. Despite the generally depressing picture of community
involvement painted by her Macedo introduces a sightly more hopeful
note when she describes the successful outcomes of some favelado
struggles (Macedo 86:135f). These were unintended gains made
possible by the state's need for popular support during the time of
the 'abertura' in Brazilian politics (democratisation process), and
also by the ability of the favelados to organise effectively and
enter into alliances with other oppositional groupings outside the
urban squatter communities, such as a large contingent of student
and staff from the local university, the organised labour movement,
the national association of squatter communities and, last but not
least, the church (Macdeo 86:224, 247-249).

CHAPTER IV
The Existing Community as an Opportunity for Community Participation

As indicated earlier, this chapter proposes to look at CP more from the point of view of the second type of contributor to this subject, the idealist, who places greater emphasis on CP as a viable means of transforming interhuman relationships in a spiritual/ethical context, a means of empowering communities and its members not only to gain control over the practical circumstances of their existence but in doing so together to acquire the ability to generate higher levels of awareness within the community in all aspects of their existence. For this purpose Bakhteari's PhD thesis (1987) on upgrading katchi abadies in Karachi is an invaluable and unique source. It will therfore be used extensively to illustrate this type of approach to CP.

Let us begin with a fact pointed out in the previous section, namely, the point that communities are not homogeneous uniform entities neither for that matter are they amorphous atomised agglomerations of individuals. But communities possess a structure. The commentators of the previous section tended to present the structure of the community in terms of social stratification, i.e. of divisions between groups within the community which represent obstacles in the path of CP. In the present section, by way of contrast, the structure of the community is seen in terms of social organisation, i.e. of groups and networks of people which form the supporting framework of the community and are therefore regarded as the original basis within which CP already exists, albeit in an undeveloped rudimentary and restricted form. Depending on the specific type and geographical location of the community such social organisation can consist of many divergent elements: of traditional religious, village, ethnic or kinship affiliation which settlers brought with them when they originally came from the rural districts, further strengthened by friendship, neighbourhood and marriage ties. It can consist of larger formal political organisation which may have grown out of the strong sense of solidarity resulting from a planned and successful land invasion and, in fact, predating the invasion. It may comprise small formal organisations such as sports clubs, parents' committees of local schools, ot those with ties to the outside world like charitable or voluntary organisations and the churches. Together all these form a dense multi-stranded crosscutting network of ties. To add to the complexity of the picture Bakhteari notes that a squatter settlement is usually highly heterogeneous in its make-up, with residents ranging from the illiterate and permanently unemployed to professionals, lawyers and doctors, without loosing its sense of community. The sense of continuity and belonging in the settlement is given by these various community organisations but it is greatly strengthened by the hard-core old-timers of original settlers, these form a stable nucleous for leadership (Bakhteari 87:52,70-71,74; Lloyd 79:163-168).

The various groups and informal networks perform an important function of co-operation and mutual aid within the community. For newcomers from the rural districts they act as a buffer to soften the impact of urban life, they help him to integrate into the life

of the city, to find work through informal social contacts. They
assure residents who fall on hard times a means of survival through
emotional, financial and material support from their fellow
settlers, informal contact to the outside medical and legal system
provide emergency assistance. Childcare problems are taken care of
communally. Internal disputes are settled by arbitration within the
community. In short, social contacts and networks insure settlers
against economic, legal and medical dangers, which in the legal
city are provided by lage impersonal organisations and which are
formally inaccessible to the 'illegal city' (Bakhteari
87:61-63,71-73).

Bakhteari argues that this indigenous communal social organisation
is the basis in which any progressive CP has to be firmly rooted in
order to be successful.

> "A project implemented by building on the existing situation of
> squatter settlements becomes self-generating and continues on its
> own because it is knitted into the community's system."(Bakhteari
> 87:56)

Thus the key factor in successful project implementation is the use
and upgrading of existing social organisation. Thus what we have
here is the idea that the existing social structure is an important
asset to be used in the mobilisation of the people. Compare this
with Whyte's resigned realism advising the unwary project planner
that some acceptance of the existing social structure is
'inevitable', i.e. cannot be avoided (Whyte 84:237). Two
commentators on CP who see the same situation with different eyes,
approach it with a different research methodology and who will
surely end up with different operational results.

It is a commonplace sociological assumption that traditional
religious, ethnic and kinship ties within a community will always
act as a brake upon the emancipation of the community in a modern
progressive context of communal participation and that such ties
need to be broken or weakened before progress is possible. How does
this assumption square with Bakhteari's celebration of existing
organisation as the foundation of progressive CP? She argues that
community and people oriented development approaches will effect
slow and organic changes in the traditional value system (Bakhteari
87:6). In her own work in the katchi abadies she found the hard
proof that this was, in fact, possible. She cites the Memon Jamat
as a good example of a traditional community organisation which
could be won over to the cause of progressive development, they
became the protectors and sponsors of the 'Home Schools' movement
in its first institutional phase (Bakhteari 87:274-278). In another
instance the strategy of byepassing an uncooperative traditional
Jamat organisation was adopted in favour of the young and
enthusiastic members of the local cricket club, which represented a
certain change in the community's leadership patterns. But later
the old men of the Jamat were convinced by the young men's efforts
and results (Bakhteari 87:201f,211,230). Narine gives an example of
the overcoming of caste barriers to CP in the 1981-82 urban renewal
project in Hyderabad, India. At this occasion the officials of the
urban community department organised cultural programmes and
seminars on the virtues of working together. Despite the fact that
85 per cent of the families belonged to schduled castes solidarity
and co-operation grew. One of its expressions was the manufacture
of local building materials for the entire community by families,

whose skills were linked to their caste, at a much lower price than
that of the market (Narine 86:121). This not only shows that
traditional problems of caste divisions can be overcome it also
proves that the social distance between officials and dwellers can
at times be overcome by officials.

But in general terms Bakteari would argue that a much greater
problem for CP and self reliance are the prejudiced blinkered
approach and the restricitve practices of outsiders to the
community. Outsiders are blind to the important fact that
communities already possess the basic organisational and technical
skills to provide for their own services and housing needs. Given
the existing climatic conditions and the available materials the
houses are functional and have been built adequately with a premium
on comfort and efficiency. Improvements are gradual and in stages
according to the given financial situation of a family at any
particular time. The 'rationality' of the poor makes them merely
adopt different priorities: food is more important than shelter,
education for the children is also very important (Bakhteari
87:60,85,301; Lloyd 79:172-173; Gilbert 81:83f). But outside
planners and government officials are unable to perceive the
inappropriateness of their decisions and policies which merely
reflect their own values and class background. They are unable to
see that squatters need housing close to elusive employment
opportunities rather than good housing, that they need access to
safe drinking water, protection from floods, privacy, efficient
waste disposal, sanitation, access to friends and family, cheap
materials, small loans, etc.. But as a result of their distance and
lack of understanding government projects on the whole rarely cater
for such needs but seek to impose their own world view (Bakhteari
87:80-81).

In Bakhteari's view there are thus no insuperable barriers to CP
within the community itself. She suggests that, to the contrary, as
soon as external restrictions such as building codes and
regulations are lifted, as soon as there is the slightest sign of
informal recognition and security of the settlement, such as
provision of a standpost, the progressive development of the
settlement begins by itself as a result of the poor's own
resourcefulness, energies and skills, They merely need to be
liberated from the restrictions imposed upon them from the outside
(Bakhteari 87:118).

This is what she calls the bottom-up approach of CP mentioned
earlier in which the community develops itself slowly and in
distinct phases according to its own priorities and abilities. The
settlement may start off as unserviced shacks and gradually turns
into suburbs as a result of the dwellers' consistent demand making
and lobbying of government agencies and politicians (Bakhteari
87:64,65,69,124-125).

Apart from the problem of outside prejudice and restrictive
practices Bakhteari points to another problem for which she offers
no solution. The urban poor, despite their capacity for progressive
development need major inputs of capital and technical advice. She
asks how the dwellers in the face of such dependence can preserve
their self-reliance, how they can preserve their existing dynamic
social and political system if they are to be integrated into the
outside legal system (e.g. legalisation).

CHAPTER V
Women as an Opportunity for Community Particiapation

The same idea that the community already possesses the neccessary human resources for successful community development lies behind the emphasis of women's envolement in CP. However, women as a resource for community development have so far been largely neglected. To begin with, women constitute half or more of the adult population in low income settlements. Here we find two types of household. In the first type women live as spouses or partners and are often prevented from participating fully in the public sphere, either due to traditional restrictive conceptions of a woman's place and/or due to the conventional division of labour which allocates to women all domestic work. The second type of household is the woman headed household. It is not a very widely published fact that 30 per cent of households in the world (more than that in Latin America) are headed by women. Either due to the man's temporary or permananet absense women are de facto or de jure the heads of households. Here women often have much greater personal freedom (as well as the sole responsibility) to actively participate in the community. The prevalence of women headed households in low income communities is increasing. They tend to be poorer than male headed households because they often not only have to take care of children and domestic duties but they must also function as main wage earners which is usually very difficult to achieve. They should thus increasingly become a target group in development projects. And yet most planners still assume that households are male haeded by definition. Therefore, it would be true to say that the crucial potential role of women in the development of settlements is generally not recognised by the planning authorities and the male sector of the community.

In order to access the women in a community as a resource for CP we must know the constraints operating to prevent women from participating at present. The participation of women in projects is usually restricted at four levels:

1. lack of power
2. lack of money
3. lack of time
4. lack of self-confidence

Women's lack of power can be intensified or at best left unchanged by development projects if the special problems of women are ignored by developing agencies. The above mentioned wide spread assumption of planners and developers that households are, by definition, male headed has momentous consequences, especially when such an assumption forms the basis of eligibility criteria such that women headed households do not qualify for participation in a given project (HABITAT 86:4-5). Furthermore, the titles and tenure rights are usually only given to men (in some countries women do not have the right to own property). This has consequences. Firstly, because land or house ownership is an important form of saving and investment, women and their children may find themselves in the street in the event of a separation. It is also easier for a man to divorce his wife if he alone owns the plot and dwelling. Secondly, the man's considerable control over the household becomes absolute if he is also the legal owner of all property. Finally, access to credit is often tied to property as collateral for loans so women

without property title cannot get them. Another aspect of women's lack of power in low income settlements is that they often do not receive the relevant information regarding availablity of projects, planning, communal decision making. Often such information is distributed in written form, many women are illiterate. Due to their responsibilities in the house women are less likely to be exposed to such information, less likely to get to the public places, or work places where such information hangs out or is discussed. Here women headed households are in a better position as these women are more mobile. Even direct methods of advertising such as public meetings often cannot have much impact on women because they are detained in the house either because of their domestic duties or due to the veto of the husband. Even if women want to enrol in a project they often don't know their way around the city for registration at the appropriate office, carrying with them the relevant documents and personal details needed for a household to make an application. It is also a fact that women are often excluded from the political organisations of the settlement. And yet these are the bodies on whose participation outside agencies rely for the success of their projects.

The second main obstacle to women's participation is the lack of money and finance. Due to their role in child bearing, child rearing and domestic management most women, if they work outside the house have to find work in the informal sector where their wages are lower than those of men for equivalent types of work. Women thus have to work for more hours per day than men in order to obtain a subsistence income. Furthermore, women normally do unskilled work which is poorly paid. Thus if income is the main selection criteria of a target population for a project women's low income prevents them from qualifying. And yet, it has been shown that women headed households are usually more effective at saving, more committed to spending money on housing and have a greater willingness to pay back loans thus easing the perenial problem of cost recovery (HABITAT 86:5,7). As mentioned above women also often lack access to credit to pay for materials, etc., because they often do not have land and property titles to serve as collateral (HABITAT 86:12, 14-15,37-39).

The third obstacle to women's participation is their acute shortage of time. While it must be admitted that shortage of time restricts the ability of a great majority of the population in low-income settlements to participate (Yeung 86:11) the lack of time is usually more serious in the case of women.

In those cases where women work outside the house or are involved in some kind of cottage industry in order to provide basic income for the family or to supplement an insufficient income their lack of time is directly related to their lack of money as we have seen above. Furthermore, women working in the informal sector often loose hours on public transport, especially if their settlement is far from their place of work, if such transport only operates at peak periods and does not cater for their irregular working hours in the informal sector (HABITAT 86:12). But even if a Woman does not work for remuneration she is often so heavily involved in the rearing of many children and domestic duties, made all the more arduous by the absense of basic services, that she will have no time to spare for active CP. Thus women often fail to apply for participation in a project because sometimes this involves not only

the extra time needed to make an application but also the extra time spent travelling to the place of application (HABITAT 86:5).

The last but not least of the major obstacles to women's participation is their lack of confidence. The majority of women in the Third World and elsewhere have been brought up to think of themselves as incapable of handling anything which requires envolement in the public sphere, a belief usually powerfully reinforced by their male partners concerned to preserve this major sphere of decision making for themselves. They thus do not have the confidence to deal with bureaucratic matters, they are afraid to show their ignorance of bureaucratic procedure and, if illiterate, afraid to admit that they are unable to fill in a form.

There is at this point no time to elaborate on possible solutions to the problems raised above but the 1986 Habitat training module entitled 'The Role of Women in the Execution of Low-Income Housing Projects' suggests a broad range of practical measures for overcoming these obstacles.

Why should we involve women in community development? Moser and Chant suggest three main reasons for doing so. Firstly, women's participation should be regarded as an end in itself because, like men, they have a right and a duty to have a say in projects which will affect their lives more than the lives of men due to their roles as of house wives and mothers. Secondly, women's participation is a means of improving project results. Since in their role as childbearers and domestic worker/managers they spend a large part if not the entire day in the settlement, they are the primary and expert users of the houses and infrastructural facilities. As uch they are intimately familiar with the needs and existing defects of their particular settlements and they are more committed to a satisfactory outcome. It is thus obvious that neglecting the needs and views of the primary users in decisionmaking, project planning (land use patterns, settlement layout) and implementation will often result in project failure. The third argument as to why women should be encouraged in housing and services projects suggests that this would have a knock-on effect in other spheres of their lives. It is seen as a means to overcome their own apathy and lack of confidence and as a way to make women 'visible', i.e. to raise awareness everywhere of the potential of women for solving communal problems by means of self help (HABITAT 86:1,26-27). That this is so was confirmed by Yeung's work with housewives in Indonesian kampungs. He found that they were very effective organisers and that they had a great potential as informal leaders (Yeung 86:258).

This emphasis on CP as a vehicle for women's emancipation from traditional social and economic barriers is found in most comments on the role of women in CP. Bakhteari reports from the Baldia project that despite the traditional restrictions imposed upon women in islamic societies CP led to girls being allowed to attend a training course in immunisation outside their own community in a local hospital while two girls were allowed to train as health workers. She stresses that these changes were brought about by building upon traditional patterns laid down for women (Home School teachers). This happened in such a way that the old cultural barriers were discarded slowly and openly visible to all to the extent that the women in Baldia are now the main agents of change in the community (Bakhteari 87:Ch,12,

esp.285,288f,290,307).
Narine reports from the Chawama self-help housing project in
Kafue, Zambia (1970-73) that women's participation in
construction in this case de-emphasised the traditional division
of labøour between men's work and women's work and even allowed
women to assume leadership positions in construction groups
(Narine 86:120).
Moser and Chant stress the importance of the practical training
acquired by women as a result of CP. They suggest that while the
newly acquired practical construction skills increase employment
opportunities for women outside the house such training can also
build up a spirit of self-reliance, self-confidence and
solidarity among women (HABITAT 86:45).

CHAPTER VI
Constraints and Opportunities in the Provision of Water and
Sanitation

So far, most of this dissertation has been devoted to the
investigation of general constraints and opportunities inherent in
CP in urban community development projects since community
participation would seem to be the primary condition and resource
determining the success or failure of any such project. As the
review of some of the literature on the subject suggests, despite
the many obstacles and pitfalls presented by internal and external
factors CP, if approached with care, patience and compassion, can
be an important tool in solving the problem of urban poverty in
squatter settlements.

Let us now take a necessarily brief look at the more specific
constrains and opportunities potentially present in an urban
community based water and sanitation programme.

To begin with, it should be noted that the poor in spontaneous
settlements do not always see the provision of clean drinking
water and sanitation facilities as their first priority. Usually
food, adequate shelter and employment rank higher in their list
of priorities, often education of their children is very
important to them (see also Yeung 86:259). One reason why it may
be easier to persuade the urban poor to participate in such a
programme is that in the crowded conditions of a squatter
settlement, as opposed to the rural districts, excreta
accumulating in roads and alley ways are much more of a nuicance
and an eyesore.

But if the poor population themselves do not see water and
sanitation as a priority why should we as outsiders insist on
providing them? The answer which immediately presents itself is
that high rates of morbidity and infant mortality are usually
caused by diseases which are closely correlated to faecally
polluted water and poor sanitation (Bakhteari 87:136-140).
Narine reports that the urban renewal programme in Hyderabad
(1981-82) which upgraded housing, water supply and sewerage
disposal resulted in significant measurable benefits. It
eliminated the need to carry water over long distances thereby

allowing for daily baths. The incidence of sickness declined from 10 - 15 man-days lost per month to 3 man-days lost (Narine 86:122).
However, there is another more subtle argument, namely, that participation in water and sanitation schemes requires the participants to understand the health issues involved and therefore may lead to the community's engagement with other improvement issues such as waste disposal, primary health care provision the recruitment of community health workers, litercy training, all of them designed to empower the community to take charge of improving their lives in the absense of state involvement. In this sense Bakhteari argues that sanitation schemes are particularly well suited to stimulate and consolidate integrated community development, that in the case of Baldia Town the construction of soak pit latrines worked as a vehicle of social change (Bakhteari 87:306).
Narine argues that in Hyderabad the knock-on effect of improved housing, water supply and sanitation included amongst other things a decline in gambling and excessive drinking as families' responsibility increased, and also a change in cooking habits (a greater level of hygene, less environmental degradation through use of fuel instead of wood). With the increase in social status of residents came a higher consumption of nutritious foods, there was greater attention to personal appearance, a movement towards permanent jobs, and monthly income had increased by 87 per cent due to the increase in the number of earners per family (Narine 86:122).

It thus appears that the upgrading of water supply and sanitation in a spontaneous settlement, even if it is not a top priority for the settlers, can be an important means of substantially improving the quality of life in the community. It may also be more feasible than, say, the large scale provision of employment opportunities in the formal sector.

Let us consider a range of factors promoting or inhibiting the feasibility of water and sanitation schemes. It is not always possible to neatly separate social (institutional/cultural) factors from economic and technological considerations as they are interdependent, but such an artificial distinction will help to clarify the issues involved.

Social (institutional\cultural) Factors

One of the first obstacles to be overcome by organisers and project workers in a squatter settlement is the deep distrust the poor commonly have for outsiders. It is the result of the brutality and disregard which outside agencies such as the police, politicians and state officials have traditionally displayed towards the urban poor. Bakhteari argues convincingly that this distrust can gradually be overcome if the project workers and facilitators take part in community life on an informal basis for a considerable period and combine an attitude of sympathy and compassion with an appropriate technical solution. Excreta disposal in particular is usually a culturally delicate issue requiring a great deal of sensitivity on the part of the project staff (Bakhteari 87:230-231,304-305).
Another way to gain the confidence, co-operation and active involvement of the community is to adopt the bottom-up approach

mentioned earlier which contrasts with the conventional top-down approach of professional planners and bureaucrats not only in that it involves the dwellers in the planning\decision making and implementation stages of the programme but in its essential reliance on the community's own inherent organisational structures, skills, resources and cultural practices. Bakhteari argues that such an approach fits in naturally with the poor community's own 'progressive development system'.

"The approach adopted by the project was to participate in the community's programme rather than to insist in the community participating in the project." (Bakhteari 87:302)

She suggests that this would solve persistent problems such as cost recovery, affordability, replicability and continuing motivation (Bakhteari 87:303). A pertinent example in her own work in Baldia Town of such an upgrading approach is the use of the 'Home School' movement as the main carrier of progressive development in other branches quite appart from its original intended purpose of literacy training. It provided the original stimulous for dwellers to generate other services and benefits: health education, teacher training, primary health care centres, income generation (for teachers), soak pit promotion and immunisation projects (Bakhteari 87:274f, 286).

Two other more specific socially relevant points have been raised by various authors which have to be borne in mind if the scheme is to be successful. Firstly, there is the question of effective leadership which has already been touched upon in an earlier section. Yeung stresses the importance of an extensive network of strong competent leaders as against only one (often appointed) leader and suggests that leadership is perhaps the most critical factor for the success of participatory development schemes. Most studies point to the need of improving leadership qualities through formal and informal training (Yeung 86:258; Narine 86:125).
The second specific socially relevant point is the question of community size. Both Yap and Yeung draw attention to the fact that if the size of the communal unit chosen for the scheme is too large CP becomes unviable because of the difficulty in achieving a sense of community and solidarity among participants (Yap 83:194-195; Yeung 86:257-258).

A general problem addressed by several authors is the problem of motivation to participate. Suggested strategies are education, organisation, mobilisation (Bakhteari 87:308). Participants need to be made aware of their importance to the project, they need to be trained (Narine 86:125); they need to be made aware of health benefits and a spirit of competition between participants should be encouraged (Pickford 83 a:392). But the greatest obstacle to the motivation of dwellers to participate in water and sanitation schemes suggested by many commentators is the lack of security of tenure and the danger of forcible removal (Pickford 83b:211).

Economic Factors

The chronic shortage of money in spontaneous settlements is one of the chief restraints on people's participation in water and sanitation schemes. Squatters often refuse to take part in such

schemes if high sector development charges are imposed on them by private and public developers, they are simply beyond their means. Furthermore, residents tend to be reluctant to pay such charges before the improvements are actually carried out (a case of well justified distrust). Alternatively, the neccessary funds may be raised by foreign loans quite easily but the problem here lies in cost recovery for loan repayment. One might argue that in view of the appalling conditions in squatter settlements and the inability of the majority of the settlers to pay out comparatively large sums for essential services like water and sanitation the international and state agencies should provide such services free of charge. However, there is nowadays a growing consensus amongst commentators that this would be a bad thing, that people in general should pay for water and sanitation and that apart from technical advice the agency should subsidise only the poorest families or that the subsidy should consist of no more than one or two subsidised free component parts (e.g. the slab or vent pipe in the case of a pit latrine)(Pickford 83a:392). The two main arguments to back up this position run as follows.
1) Due to the resultant cost saving to the agency the available investment capital can be spread further to allow more people to benefit from the scheme (Pickford, ibid).
2) People will not participate nor care for the facilities which are provided free of charge. Thus the success of the scheme and its future maintainance depends on the dwellers' taking on financial responsibility for their own development (Franceys and Cotton 87).

In order to tackle the problem of how the poor will raise the substantial sums needed Franceys and Cotton suggest an 'incremental options approach' where the outside agency provides merely the absolute minimum of infrastructure free of charge (e.g. ground preparation, rough roads, rudimentary site drainage). The dwellers then provide their own housing and services in incremental stages at their own pace and at levels which they can afford at the time. Loans for materials will also be made available in stages, each new loan portion being made dependent on the repayment of the previous one, thus skirting around the problem of cost recovery (Franceys and Cotton 87).

Factors Affecting the Choice of Appropriate Technology

When selecting a particular technological option for improving a squatter settlement we must bear in mind that we are dealing with the poorest of the poor. Thus the technical solution should be affordable. It should also be health promoting, appropriate to the needs of the people, self-built, self-financed, self-maintained and lasting. It should be suitable for making use of existing building techniques, practices and the skills normally available in the settlement. This would ensure not only employment opportunities in the more specialised tasks households cannot do for themselves but also guarantee replicability in neighbouring communities. It must take into account existing cultural practices such as the use of materials for anal cleansing, the acceptablity of communal as against individual facilities, freely running or tap water, washing habits, defecating position, siting of toilet and toilet door, etc. (Pickford 83b:211,213; Bakhteari 87:152).

The choice of technology is usually also limited by the location of squatter settlements. These are typically situated in the most undesirable areas of the city, shunned by developers and speculators. This means that often the ground is marshy and the water table is high or the terrain is steep and rocky both of which limits the choice of water and sanitation technology severely. Bakhteari notes that katchi abadies are usually located in low lying areas and near the banks of large open sewers (nallahs) which overflow during heavy rainfall causing great upheaval (Bakhteari 87:137-138). Other factors are small plot size and quantity of water available (Pickford 83b:213). Another important factor in the choice of technology is its suitability for upgrading if and when the settlers are in a position to afford a higher level of service.

Of the water supply options commonly listed in project manuals none can satisfy all of the criteria of desirable characteristics listed above. The cheaper options like the communal well, or existing water course or pond which would be affordable and available for self-help construction tend to fall down either on grounds of inconvenience or water quality (i.e. the possibility of pollution) or on dependence on geological or climatic conditions. While public standposts, the cheapest and usually good quality source of water which can most easily be provided from the already existing urban water supply, are in many cases unavailable for political reasons as such provision would represent an indirect regularisation of the squatter settlement on the part of the authorities. The individual well on the settler's plot, which would offer a convenient potentially very safe source of water, must usually be ruled out for squatter settlements due to its high cost, its dependence on geological conditions and pollution-free ground water. The later can rarely be taken for granted in crowded low-income settlements.

One of the important considerations in the choice of water supply options is whether the supply should be communal or to individual households. The problem with communal distribution points is not only the inconvenience to users who may have to walk long distances to collect their water, but also that it will be difficult to find a way of paying for the water used which is fair on individual households. If provided free of charge there is often a great wastage of water and the facilities tend to be treated carelessly or are neglected on the part of the authorities as they yield no revenue. For a useful summary assessment of water supply options see Urban Projects Manual (1983:53-54, Table 10).

On the whole limitations similar to those which affect water supply options also tend to affect the selection of sanitation options. But in addition to the lack of money and the often unsuitable geological conditions sanitation options in urban development schemes are often restricted due to an acute shortage of water and space (small plot size). For an assessment of sanitation options Kalbermatten provides some useful information (Kalbermatten 1980:12-25).
On the whole sewerage systems, although favoured by users, are too expensive in terms of capital investment (often 10 to 20 times more than on-site disposal options) and too costly in terms of water consumption. They tend to require sewerage pumping

stations. Sewerage systems are also not suitable for self-help construction. They easily get blocked if not enough water is used or available. Also in the absense of adequate refuse collection sewers tend to get blocked as people dump their solid waste down the manholes (Bakhteari 87:147). However, as Pickford points out, there may be conditions where a sewerage system is the most appropriate technology.

> "Nevertheless, where there is an existing sewerage system with spare capacity the provision of water closets connected to the sewers may be the most appropriate sanitation option. There may for example be sewers actually passing through or alongside the slum or squatter area or the ...sites may be on high ground from which sewage can gravitate along short lengths of pipe to existing sewers. At very high building densities...space may be at such a premium that sewerage becomes more appropriate than on-site sanitation."(Pickford 83a:388)(see also Kalbermatten et al. 80:103-104).

Septic tanks have limitations similar to those of sewerage, they are expensive to build and need a lot of water. An additional disadvantage is that they need a great deal of space for drainage fields. They are also not appropriate in areas with a high water table - a common condition in squatter settlements.
Thus for most urban squatter sites sewerage and septic tanks are not a viable option.
Aquaprivies, too, need a fair amount of water, but waste water can be used. They are often comparatively expensive to build but they can be suitable for households without piped water (Pickford 83b:212; also 83a:391).
Compost latrines and biogas units are often unviable options in urban settlements as they require 3 times as much vegetable matter as excreta or a large amount of animal excreta respectively neither of which tends to be available in a crowded urban setting. Furthermore, composting, due to its complex operating cycle, demands a great deal of dedication from its users and an already established tradition in excreta re-use for farming purposes unlikely to exist in the city environment.

Bucket latrines, some form of which is common in many squatter settlements, have been found to be very insanitary and it is rarely possible to overcome the ~~problems of~~ risk of infection to those who have to handle the fresh excreta. Also the collection system if efficient and safe is usually quite expensive.

The most widely recommended form of sanitation option for squatter settlements is some form of pit latrine which can be adapted to suit most conditions in urban low-income settlements (Pickford 83a:389). They can be relatively cheap to build with the dweller's own labour input and locally available materials and skills and they can be maintained by the householders themselves. This does away with the critical dependence on the state authorities for maintainance. Provided with either a vent pipe or a water seal squatting plate they overcome the perenial problems of odour and harmful fly infestation which besets the traditional type of pit latrine. Their design can also be varied to take account of rocky ground or a water table which is too high by either raising the superstructure of the latrine above ground level or by digging two shallow pits instead of one deep one.

If at all possible the construction of individual latrines on dwellers' own plots should be given preference to communal facilities because the inconvenience factor is very great and their operation and maintainance is frought with difficulties. People will not be very motivated to keep facilities in good clean condition because, as in the case of water supply, they do not invest their own resources into these facilities and hence will not feel responsible for their maintainance. If due to the lack of funds or of space on individual plots there is no alternative to communal provision care must be taken to ensure adequate operation and maintainance, for instance, by charging a small amount for using the facilities so that an attendant can be paid from this revenue.

To conclude with, it should be emphasised that there is no single water supply or sanitation option which would fit all possible conditions in squatter settlements. Social (institutional\cultural), economic and technical factors together always form a unique constellation in any one settlement. Therefore each one of them calls for a solution which has to be designed with specific regard to its particular set of conditions,

BIBLIOGRAPHY

Bakhteari, Quratul Aiu, A Stategy for the Intergrated Development of Squatter Settlements: a Karachi Case Study, PhD Thesis, Loughborough, 1987.

Bell, Morag, Conversation 3.5.88

Cotton, A.P. and Franceys, R.W.A., Engineering Services for Low-Income Urban Housing in Sri Lanka, Occasional Paper No. 3, (1987), WEDC, Loughborough University

Donohue 1982, in Bakteari 1987:12

Gilbert, Alan, in Gilbert, A. and Gugler, J. (eds.), Cities Poverty and Development, Oxford UP, 1981.

HABITAT (United Nations Centre for Human Settlemtent), The Role of Women in the Execution of Low-Income Housing Projects, a training module, based on research by Moser, Caroline and Chant, Sylvia, Nairobi, Kenia 1986.

Kalbermatten, John et al., Appropriate Technology for Water Supply and Sanitation, World Bank, Dec. 1980

V.d. Linden, J.J., in Schoorl (ed) Between Basti Dwellers and Bureaucrats (1983)

Lahini 1978, in Bakhteari 1987:18

Lloyd, Peter, Slums of Hope, Penguin, 1979

Hindrenk and Sterenburg (1975), in Bakhteari 1987:18

Macêdo, Myrthes de A., Housing Policy of the Urban Poor: a Study of the Impact of the Promorar Programme in Favelas of Juao Pessoa, PhD Manchester University 1986.

McAuslan, Patrick, Urban Land and Shelter, London/Washington DC, 1985.

Midgeley, James, et al., Community Participation, Social Development and the State, London/NY 1986.

Narine, Dhanpaul, Chapter 5: Urban Develoment Housing and Community Involvement, in Midgeley (ed) (1986)

Oliver, 1973, in Bakteari, 1987:18

Pickford, John, Sanitation for Urban Squatters and Slum Dwellers, Forschungsinstitut der Friedrich Ebert Stiftung, Vierteljahresberichte No.94, Dec.1983a), pp385-393
also: Planning for improved Sanitation, in Schoorl (ed) 1983b)

Reed, Robert, Conversation 27. 5.88

Rosser, 1972, in Bakhteari, 1987:18