

Working Paper No. 56

**GENDER ISSUES IN
PROJECT PLANNING AND IMPLEMENTATION:
THE CASE OF DANDORA SITE AND SERVICE PROJECT,
KENYA**

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Acknowledgement

The publication of the Gender and Planning Working Paper series has been made possible by a grant from the Ford Foundation, New York. These papers have been developed as resource materials for the Development Planning Unit's Short Course on 'Planning with Women for Urban Development'. The course has been running annually since 1984.

These working papers could not have been completed without the co-operation of a number of people - Caroline Moser, Course Director; Caren Levy, Associate Course Director; Linda Peake, Editing Consultant; and Jane Wisner, who typed the papers.

The views expressed in these papers are those of the authors and should not be attributed to the Development Planning Unit.

I. Introduction

Women usually constitute half or more than half of the applicants in low income housing projects in Africa. As women are mainly responsible for reproduction (childbearing, rearing and domestic work), they are also the main users of shelter, infrastructure and community services. Hence a better understanding of women's lives will certainly have implications for urban development planning. However, the experiences so far of African cities is that gender specific planning has not been undertaken.

Generally speaking, low income women form an increasing proportion of the urban population in African towns. Their needs are, however, ignored, with their access to resources being determined by their relationship to men and their position in the urban economy. Married women have to earn an income because often their men are not in a position to be the sole provider for their families. Rising unemployment and the still prevailing practice of polygamy in urban areas are related to this. In addition, marriage instability is increasing and a great number of women are fully responsible for their own and their children's survival.

Data on number of existing women heads of household in Kenya is limited. There is, however, an estimate that 29% of the 1.7 million households in Kenya are headed by women (Smok and Clark 1984, 343). These households are the most impoverished and have less than average access to resources, while being responsible for many dependents. It is therefore not surprising that women heads of household predominate in low income housing projects. Their strategy to earn an income is often limited by their lack of skills and mobility, and many end up finding work in the less profitable sector of the urban economy - the informal sector - as their economic activities often have to be restricted to their local neighbourhood. This is also true for women who are not heading a household. However, the combination of women's role as mothers, wives, income earners and as managers of their community has not been taken seriously by planners and policy makers.

Such policy blindness has serious implications when low income housing programmes are designed to include the participation of their beneficiaries in order to reduce public sector expenditure. Evaluation of housing projects is often based on quantitative economic assessments, only taking into account those participants having regular employment and income. The disregard of the economic contribution of the informal sector and domestic production not only has negative implications for women. In cases where women are project beneficiaries, this also has consequences for the success of the project. This case study focuses on the Dandora Site and Services Scheme in Kenya and will examine the difficulties that women face both in fulfilling the selection criteria and as project beneficiaries¹. Although the project has been considered a success as far as the inclusion of women is concerned - 48% in phase 1 - it is an example of a top down project where both selfhelp and financial assumptions forced women household heads to adopt the most expensive construction and financial options.

¹The data presented in this paper is a result of research carried out six years after plot allocation. Allottees were supposed, by this time, to have completed their houses, according to the time schedule, for phase 1 of the project. As phase 1 was considered a success by project officers, planners and politicians, my interest was soon directed to it and from that to the women participants, most of whom were household heads. The research is based on the collection of primary data by a number of methods: interviews with a 10% selected sample; case studies of women plot beneficiaries; and from participant observation. This paper also reviews selected project documents and other background information. Although the data was not collected strictly for evaluation purposes, some generalisation and assumptions may prove valid, given the spectrum of information collected.

II. The Dandora Site and Services Scheme

Planning the Settlement

The Dandora Housing Project is a site and service scheme (SSS), an approach to low income housing that was introduced in Kenya by international technical assistance agencies in order to reach low income groups with affordable housing options during the early seventies. The planning and design of Dandora was carried out by a special working group within the Nairobi City Council (NCC). It basically concerns the provision of land and infrastructural services. The dwelling is to be developed by the plot beneficiaries through selfhelp which allows incremental financing over an extended period of time. This assumes a reduction in production costs by utilising the allottees' unpaid labour and is the main rationale for site and service projects.

Dandora is an example of such a project: a large scale attempt by the NCC, assisted by the Government of Kenya and the World Bank, to programme, plan and implement low cost housing for low income households. The project is expected to provide 6,000 sites and serviced plots, the first in a series of urban projects in Nairobi and other secondary centres in the country. The project is implemented in five phases. This study focuses on phase 1, consisting of 1,029 serviced plots.

The infrastructure was completed before the plot allocation, while the allottees were given a limited range of house plans from which they could choose the design of their dwellings. Community Development workers would help the allottees in the choice of plans, amount and disbursement of material loans, building options and payment of plot fees.

Apart from these services to the individual allottee, there were elaborate social and commercial facilities provided by the project, such as schools, markets, workshops and community centres. Creation of employment opportunities was also one of the main objectives of the project - the location was chosen for its proximity to an industrial area. As for within the project area, strict zoning regulations were enforced to separate residential from business areas. The project created a Housing Development Department (HDD) to promote the development and the integration of all these facilities. Their role was to give assistance to the allottees from the moment of their selection, forming a link between the plot beneficiaries and the project management.

The infrastructure facilities in the project are conventional: full sewerage; fully- developed access and circulation roads; in-house water taps; street lights; municipal refuse collection; and open storm water drainage. The systems were contractor-built and were to be operated and maintained by the NCC. This choice was recognised as very costly for the low income groups, but low cost infrastructure was considered to be too controversial². On site location, public standpipes or ablution blocks and a limited access road system could all have been delivered at much lower cost, possibly through community participation, but would constitute a too radical break from the conventional housing approaches practised so far.

The infrastructure available to the allottees was in general well built and of a good standard. The participatory element in the use and upkeep of the facilities was mainly thought to be needed within the individual plots: since it had been assumed that subletting would become an integral element in the development of the area, the internal use and maintenance within the plots were to become the management task of the allottee. As we will see later, this assumption proved to be correct in most of the

²Bylaws in Kenya do not encourage non-waterborne sanitation (Kenya Low Cost Housing Bylaw Study 1980, 18).

cases, but problems were frequent if the allottees functioned as an absentee landlord.

The general infrastructure facilities did, however, after a few years, encounter numerous difficulties, because the municipal management proved to be weak. The refuse collection system virtually collapsed, street lights stopped functioning, drainage channels were unattended and deteriorated, while the access roads lost most of their surfacing within a few years. The fall in the level of infrastructure services created a negative atmosphere in the area and the residents' attitudes became clearly affected. They resented having to pay very high plot charges for plots with very poor services. The municipal failure to provide basic infrastructural management negated the advantages of conventional infrastructure that planners had chosen in spite of its high costs.

Background of Women Allottees

Most women who applied to the project are heads of households. They come from different areas in Nairobi, where most of them lived in rented rooms or shacks. They originally came to Nairobi as migrants from the rural areas, looking for jobs in the city, following their husbands or escaping failed marriages.

Although economic survival was their priority in the city, their housing conditions were often very precarious, aggravated by the instability of illegal housing, resulting in frequent shifts from place to place; housing insecurity and job insecurity tended to reinforce each other. Dandora appeared therefore to offer a way out through security of tenure. It promised legality, better housing conditions and even title to the land. This was in practice a great change from the traditional situation where women could not inherit land (Barnes 1976, 58-59). It is therefore not strange that the project has attracted so many women.

What are the main opportunities and difficulties that women had to face (and still do) in the stages of project design and implementation? To be able to review some of these issues, it is useful to assess the selection criteria and the assumptions made by planners during the implementation process.

III. Project Design Process

Selection Criteria

The selection criteria in urban housing projects are designed to ensure that the project benefits low income groups who because of their low earning capacity cannot afford to obtain conventional housing. Cost recovery is one of the main concerns to allow replicability of projects. Nevertheless, charges should not take a disproportionate amount of the allottees' household income, if low income groups are to be reached. In the Dandora project a minimum of 20-25% of the allottees' income was to be allocated for housing expenditure (Development Plan 1979/1983, 172). The costs of the plots in the scheme was based on this assumption (Chana 1979). The minimum and maximum monthly income requirements were between Ksh.280-560 (US\$15-30).

In addition to the income requirements, the applicants were:

- (i) to be heads of household;
- (ii) to not own other property in Nairobi;
- (iii) to have supporting documents and complete and legible application forms;
- (iv) to have lived for more than two years in Nairobi.

Income Requirements. Applicants were asked to provide information about their income in the form of a cash flow statement, if they worked either in the formal or in the informal sector. A baseline survey (Senga, Ndeti & Associates 1977) reported that 63% of the applicants worked in the informal sector and therefore earned irregular incomes. Women in particular could barely reach the minimum income required. In this study, the women's work status and average income are shown in Table 1.

Table I
Employment Status and Average Income of Women Participants

Employment Status	No.	%	Average Income (Ksh)
Self employed	21	48.8	970
Formal sector	8	18.6	1,235
No occupation	14	32.6	695

Only 18.6% of the women allottees worked as cleaners, messengers and teachers in the public sector. The majority, 48.8%, were self employed, selling vegetables and charcoal either from their houses or in the market. Another 32.6% had no other source of income other than from subletting rooms. These women who were reported as having no occupation also included those who were too old to work or who had lost their source of income when they moved to the scheme. However, many of the women heads of household did not have a cash income to report when they applied for the project. They relied on income transfers from relatives and existing social networks. Hence there is a need to consider income transfers to facilitate the access of low income women to projects.

The assumption that 20-25% of the household income can be spent on housing is also quite unrealistic, because of the following two points:

- (i) The irregularity of income earnings of the self employed and women who live solely from subletting income;
- (ii) The impossibility of setting up a fixed amount in cash for housing expenditures for women who live from income transfers in the form of gifts and payment in kind. It is, however, important to note that although income requirements were posed as crucial in the selection criteria, there is evidence of a certain relaxation of these criteria by the project staff given the number of women heads who were selected as potential allottees.

The down payment requirement. This requirement of Ksh600 - introduced for water connection and the disbursement of the materials loans proved to be too high for the women applicants and may have excluded a great proportion of them. Several women reported having to secure loans from informal money lenders and relatives to be able to pay for the downpayment. They had no savings on their own and were therefore forced to incur extra debts³.

A baseline survey (Senga, Ndeti & Associates 1977) shows that the combined household income of the allottees and their household members from all sources, were between Ksh250 and 499 per month. Since women heads of household are often the sole breadwinners, it is evident that their monthly incomes fall in the bottom of this category and rarely reached the above figures needed for the downpayment.

Equally, monthly payment requirements, based on costs of services, material loans and interest rates, were set up with allottees with a regular cash flow in mind. This was not appropriate for the women applicants. From the 43 women interviewed in this study, 41 were in rent arrears from a period of between 2 and 12 months. When asked how they expected to pay their debts, the average answer was 'after harvesting' (which is once or twice a year) and 'when I am able to build and let more rooms'⁴. Repayment schemes obviously have to be made more flexible, i.e. according to the allottees' cash flow, if target groups are to be reached.

Household composition. By definition, heads of household are those who are the main providers for the household. Planners, however, have a western perception of the ideal family, i.e. of a male headed nuclear family. As mentioned earlier, in Kenya de facto women heads of household constitute a high percentage of the urban poor; in their own right they constitute a great majority of the applicants for the low income housing projects.

Women applicants had to prove they were separated, widowed or single with children in order to be considered as potential beneficiaries. Single women with no children were not considered on the basis that they were not heads of household. Given the local cultural context, within which women's legal status is still defined by their marital status, women feel in an ambiguous position due to de facto separation or even to the status attached to being married.

³A survey carried out by the Undugu Informal Sector Programme (1985) in low income areas in Nairobi found that women are often charged with high interest rates by informal money lenders.

⁴The payment of rent arrears after harvesting was also confirmed by Mrs Mutuku (Asst. Director Community Development Division). According to her, the division distributed vacant municipal land within the project area to women who have lost their source of income when they moved to the scheme, or to those whose incomes were below subsistence.

Table 2
Marital Status of Women Participants

Married Husband Living		Separated	Widowed	Single	Total
On plot	Off plot				
5	6	9	4	19	43

As shown in Table 2, 11 women from the sample reported being married, but in fact only 5 of them lived with their husbands on the plot. The other 6 were part of polygamous households, two of whom had not seen their husbands for ten years, but still reported themselves as married. This is an example whereby the requirement of being head of household is partly detrimental for women who do not see themselves as such. On the other hand western ideological assumptions that women cannot be the main provider is used to exclude women applicants, even when they are the main earners in the family.

Selection criteria could have also contributed to the exclusion of women who belong to polygamous households. In Kenyan society, polygamy is still common in urban areas. Although women in polygamous marriages have their own households and are the sole breadwinners, they were excluded on the basis of being married and thus not legally being the head of their household. Similarly, if their husbands owned other property in Nairobi, this will also lead to the exclusion of women.

Women allottees in the sample often complained of not having control over the property and income of their husbands. I came across cases of women allottees who came to the project office to complain that their husbands had sold their plot in Dandora without the family's consent. It happened that husbands sold the house secretly and disappeared with the money. The truth only became clear to the wives when the new owner came to the house to declare his ownership and evict the family. According to project staff they were often confronted with such cases and were considering adding the wives' name as co-owner to protect their interests.

The length of residence in Nairobi is another requirement that is difficult for women to confirm. If they came with their husbands to Nairobi, only the husband and his 'family' is registered as residents. Married women are also economically insecure in urban areas and therefore they often spend time in their rural homes at harvest times or when there is great economic pressure on their families. Thus, they are often unable to decide about the length of their residence in the urban areas.

Having complete and legible application forms. This requirement assumes that project applicants have a regular employer and a regular job. A baseline survey (1977) reported 63% of the applicants as working in the informal sector, in small family enterprises or in self employment. Women constitute the majority in these categories. Proof of income by the employer excludes self employed women. As an alternative, a hawker's licence was required, i.e. a licence for the informal sector vendors issued by the municipality. This demand, although showing a positive attitude towards the informal sector applicants, could not be complied with by the majority of the women working in this sector⁵.

⁵The history of repression of the informal sector in Kenya is maintained through strict licensing. Most women petty traders in Dandora do not have licences, thus being subject to police harassment.

The filling of application forms was another procedure which had to be given special attention by the project staff as far as illiterate applicants were concerned. The project staff were to check and help applicants who either did not know how to or did not feel confident enough to fill in the forms. The honesty of the staff plays an important role because this practice often gives opportunities for corruptive practices, e.g. payment asked of project applicants, the inability of the applicants to verify if their names were actually written in the application form. Women constitute a high percentage of the illiterate applicants. The level of illiteracy in this study was 67%. Although many got access to the project, others may not have applied due to the many administrative demands on their time, which also resulted in a loss of money for those working as self employed.

IV. Project Implementation

Planning the Dwelling

The plot sizes ranged from 100 to 160 sq. meters. Plot beneficiaries could choose from three plot types, depending on their income level.

Type A with a total of 690 plots was affordable by households whose income was as little as a twentieth percentile of the urban income distribution in 1975 (Development Plan 1979-1983). 95% of the women in the sample chose this option and the majority of households to take up this option were headed by women. In this option only a wet core (a toilet and a shower) is provided. Type B consists of 264 plots and caters for households within the 30th and 40th percentile of the urban income distribution. A wet core and a kitchen were provided which made the plots very attractive since beneficiaries could move in and start construction. The women in the sample who chose this option were married or had a regular source of income. Type C consisted of 54 plots. These were complete and were sold at the market rate for cross subsidisation purposes.

House Construction

The house construction was mainly the responsibility of the allottees and women played a very important role in this phase. Their participation, however, was linked to their available time, access to resources and household composition. The participation of women in this phase was seen as crucial for the viability and the success of the project.

All women in the sample mentioned having been involved in building their own houses. Although the degree of involvement varied with each household, they were generally involved in clearing the plot, carrying stones, mixing the concrete and cleaning the debris after the construction. Both the supportive work and the unskilled masonry work was not really seen as work by their men and by the project planners and sometimes even by the women themselves. Construction is a male dominated area in the urban areas while in the rural areas the whole construction process is carried out with joint efforts between men and women (Kenyatta 1982, 77-78). Ideological assumptions in the urban areas related to women as builders played a role in preventing their involvement, these ideologies being reinforced more in households where a man was present than in single parent households led by women.

The project beneficiaries were given a period of 18 months for the construction of two rooms (type A) and one room (type B) with a material loan of Ksh5,760 and Ksh2,880 respectively. This amount was to cover the cost of building materials only, since the beneficiaries were to use their own labour. The following paragraph will examine the assumptions of selfhelp and its effect on the women plot holders.

Forms of Self help

During the building process, allottees used three different forms of self help methods:

- (i) allottees' selfhelp;
- (ii) contracting form of selfhelp; and
- (iii) building groups.

(i) Allottees' selfhelp. This is a true form of selfhelp whereby the allottee is the main decision maker in planning, construction and in managing the building process. The organisation of these activities depends

on the allottee's own available time. The building materials used are of a cheap and temporary nature in order to maximise savings and the labour (unskilled) is not paid for in cash. Joint efforts from friends and relatives are very important here. The use of such social networks can, however, be hindered due to the nature of the new settlement. Some women said they had left all their contacts in their previous settlement, while those who moved jointly with old neighbours mentioned having had a good cooperation and solidarity amongst women, e.g. giving advice on building materials and on the availability of good labourers.

Only allottees who had been allocated type A plots had the need to build a temporary shelter, either for residence during construction or for storage of building materials. This had, however, to be demolished after eighteen months. After this period had expired, keeping the temporary shelter meant an extra income for some women - they could continue to live there while letting other rooms. Demolition of this shelter was, however, reinforced by the project staff (personal communications with project staff, HDD, March 1984).

(ii) Contracting form of selfhelp. This form of selfhelp consists of hiring skilled or semi-skilled labour for activities which the allottee cannot perform. The division of labour here is distinct; while the skilled labour performs more complicated tasks, e.g. advice on technical issues, quality of building materials, and organisation of the construction team, the allottees' role is to perform the unskilled work, endorse the decisions by the craftsman, supervise the construction team and look after financial matters.

Although the project assumed the use of allottees' own labour, evidence shows that allottees did not understand what was expected from them in relation to the plot, house plans and construction methods. In particular, women misunderstood the meaning of selfhelp and their role in the implementation process: 'Allottees expected to get completed dwellings and to have no role in the construction. They did not distinguish between "wet core" unit as the only provision on the plot and the remaining plot, which had to be utilised by employing selfhelp methods.' (Soni 1980, 54).

Selfhelp also conflicted with women's role as producers and reproducers. For women heads of households who are either self employed or who work in the service sector, their problems were evident: 'Wanjiku is a mother of five children; she was allocated a type A plot, having only eighteen months to build two rooms required. She lacked the skills in construction and she did not have a male adult in her household. During the construction phase she was earning Ksh450 monthly by selling vegetables. This income was barely enough for her family's survival. As she could not build a temporary shelter because of lack of time and skills, she had to live in her previous residence and visit the site daily to supervise the labourers.' (author's case study). Wanjiku's case is similar to that of many other women who were allocated plots in the project. They needed to earn an income, while the responsibility for the often large family did not allow for selfhelp construction.

Despite the high costs of contractor built rooms nearly all the women in the 10% sample opted for this method. This caused them to exceed the materials loan and to fall into heavy debt. The use of selfhelp also conflicted with their ability to use their own skills given the need to conform to the high building standards.

(iii) Building groups. These are in reality a combination of selfhelp and mutual assistance. The groups were organised on this basis both for financial and labour purposes. Building groups also hired craftsmen because of the absence of skilled labour within the group. The members were often self employed and very poor. Such a set-up was important for the women, if the groups were cohesive enough to negotiate for their members at the planning stage and keep together until the last member had his or her own rooms built.

From 10 women in the sample who belonged to the building groups, only 5 reported having had their rooms built through the groups, while the other 5 complained of failure of the group to build for them. The high drop-out rate amongst members, who chose to leave the groups after having benefited, as well as a lack of trust, contributed to a partial failure of the groups. This in fact caused a delay and loss of resources since the remaining women had then to build individually after having invested labour and cash in group efforts.

The complaint women had about the groups was that the members took too much time to build, compared to the other types of selfhelp groups, as much time was wasted on meetings, misunderstandings and long waiting periods (depending on the number of members each group had). However, the groups represented a step forward for those who had little hope of building by any other means. Training in management and construction for selected group members could have improved the performance of the groups.

Group dynamics. These groups could have provided an opportunity for women to have learned building skills, since they were the majority of the group members. One woman who was part of a successful group mentioned that the reasons for its success were due to the fact that they were all very poor and could not afford to build on their own. Another reason was that they all knew each other before groups were formed.

The leadership of the groups was often monopolised by men because women did not feel confident enough to assume a leadership role. But this did not prevent them from taking an important part in group dynamics. In one of the group meetings I attended, women came forward to accuse one of the men members who had joined the group only after he had chosen to build through a contractor but was now short of cash to build the roof and finishing of the house⁶. By joining the group he put the other members at a disadvantage.

Examining women's behaviour in group work, one can suggest that their resistance to leadership positions is connected on one hand with lack of training and confidence, and on the other hand the knowledge that rules have to be more strictly adhered to by women leaders than by men. This, however, does not mean that they sit back and let themselves be ruled; women are alert at denouncing and keeping members under control.

Plot Development and Employment

Women's responsibility for earning a living, childcare and domestic work, in general prevented their constant presence on the site. But site supervision and construction work was more feasible for those working in the informal sector than for the formal sector workers. While the self employed partly lost their earning possibilities during housebuilding, it was observed that they had more flexibility in terms of reorganising their time to be present on site, and consequently had a larger construction output than the formal sector workers.

It could be argued that the conflicting demands on self employed women's time were also true for self employed men, but a parallel study shows that men always had a wife or other relatives to contribute or supervise the site, who did not need to choose between earning a living and building. Deterioration in the diet and living standards were mentioned by several women heads of household during this period. One

⁶Participant observation from a meeting attended with project staff (CDD) and building group members in Mathare North, EEC funded project.

strategy used by these women was to send their children temporarily to live with relatives in the rural areas.

Zoning regulations, which separate residential from business activities, were enforced in the project area. This was, however, an inappropriate limitation given the large percentage of self employed women (48.8% in the sample). Indeed many women ignored this regulation and operated their own business from their plots and street corners.

Women working in the formal sector had more access to finance through employers and cooperatives but on the other hand could only be on site during the weekends. Hence they were subject to more shoddy work and cheating by the craftsmen. One woman claimed: 'I could not take leave during construction, neither had I another adult person in my household, therefore the construction and supervision was left in the hands of the craftsman and labourers. During my absence he mixed less cement than required and sold the remaining together with my building materials. Apart from having to hire more unskilled labour I had to meet extra costs from the lost building materials.'

The combination of being the head of household, working in the formal sector and not having other adults in the household contributed to abuses committed by craftsmen, who took advantage of the women's lack of knowledge by not following building bylaws. Lack of contractual arrangements between the women and the craftsmen also contributed to the high turnover of workers. There were exceptions to this situation, for example when craftsmen were recommended by other women allottees. According to the women this was one of the few types of cooperation made by women of the same income level.

Technical assistance was provided by the project (HDD) in order to ensure that building standards and bylaws were followed. This provision proved to be very valuable to the women allottees. However, 23.2% reported mistakes made in construction due to the infrequency of the visits the project foremen made to the sites. In a parallel survey carried out on men allottees, only 1.8% reported the same.

It appears that even if women managed to be on site, they were unable to check the work of the craftsmen due to lack of skills and knowledge. Problems mentioned included making weak mixtures of cement and stealing the remainder, to not filling in to the required depth in the foundations. As one woman recounts: 'I bought three window frames and all of them were stolen by the craftsman. He would not fix them to the wall, so it was easy to come in my absence and steal the frames.' The attitude of the craftsmen in assuming ignorance on the side of the women contributed to this situation. A study carried out by the author on the number of craftsmen and labourers used by both women heads and men heads of households shows that women used twice the number of craftsmen and labourers than did men. This reveals that not only did women have to phase construction more than men due to lack of finance, but also that craftsmen were less trustworthy in cases where they had to deal with women plot holders.

Orientation meetings and field visits were made by the project staff (social workers and building foremen), but a shortage of staff hampered what project planners had assumed would happen in practice. The ratio between the number of plots to be supervised and the number of technicians - 500:1 - seems to be far from ideal⁷. Besides there is evidence that the poorest allottees, who were often women, were treated primarily as welfare cases. This welfare approach represents a policy opposed to production, thereby contradicting the aim of the project.

⁷Building foremen and social workers are the link between the allottees and the Housing Development Department (HDD).

Perceptions of Women's and Men's Work

In general all women participated in construction work. There was, however, a division of tasks when a husband was present in the household. The women tended not to do manual work on site as long as the husband was present; instead, supervisory work, cleaning and cooking was left to them. Men and women stuck to their ascribed gender roles, where men's domain was the building site and women acted in a supportive role. Essentially, this work was perceived by all the parties involved as an intensification of women's domestic work. Thus the division of labour upheld by both men and women was related both to the presence of men and the access of resources which the household had.

Where wives were the plot beneficiaries, they would often leave issues related to construction and finance to the husbands, losing control over decision making on their own property. The following case illustrates this: 'Catherine, married and with four children, came from Machakos and applied for the project because her income was lower than her husband's and she could therefore fulfil the required criteria. After plot allocation (phase 1), her husband took control over construction, procurement and finance, by asking for a loan from his employers. When the house was finished, they let two rooms and lived in the other three. With the subletting income she decided to educate her two sisters in the rural areas. The husband did not agree and he therefore acquired a plot through illegal means in phase 2 of the same project and moved there with the children, taking full control of her renters.'

Extended households or even the presence of adult sons or daughters who could contribute with their labour was seen as important by the women: 'Ruth Wanjiku is a widow with 7 children, 3 of them adults.

She works as a cleaner in the NCC. During construction her three children did the unskilled work and supervised the site, while she did the buying of building materials. Because labour costs were reduced she has consolidated her plot.' In extended households or in large families with adult sons and daughters the division of labour is less rigid than in the nuclear households. The reason could be that such family structures are centred on a woman who is both the head of household and the plot owner, having more decision making power.

Skill Development and Income Generation

The provision of building skills to all beneficiaries, it can be argued, would result in high costs for the project agency and also a loss of investments, since it is unlikely that allottees will use such skills now in a productive way or later in the labour market (Skinner 1980, 9). This argument tends to suit the established opinion amongst the project staff and men in general that 'women do not build in Kenya', that they just 'help out' the skilled and semi-skilled workers on site. This attitude contradicts the traditional division of labour of some ethnic groups in Kenya, whereby the construction of the house is an equal and joint effort between men and women.

While such attitudes in the urban areas reflect changes in gender roles, it is interesting to note that assumptions of this nature are always based on the different physical strengths of men and women, women being the 'weaker' sex and, therefore, unable to take part in heavy tasks such as construction work. This is another contradiction that does not hold truth for Kenyan women. In reality women do the heaviest work both in rural and in urban areas. It is a daily routine for women to carry heavy baskets plus their children to the markets or to the fields, while their men walk ahead of the family.

When I asked the women heads if they would use building skills in the future if they could acquire them, the women from the age group of between 21 and 50 years responded affirmatively, but: 'only to build their own houses'. These responses appear to be reflecting an acceptance of gender roles in the new

urban setting. On the other hand they felt that having some of the skills would reduce their building costs. Analysing women's attitude here, one can assume that they have not yet thought about the social and economic factors that contribute to their weak position in society. The same women who are unable to find well paid and permanent jobs given their lack of education and are therefore clustered in the less productive and less remunerated activities within the informal sector, are the same women who are marginalised from training courses which can in the long run bring about change in their lives. They, however, do not at present criticise this system, or organise collective action with a clear set of goals from which they could alter their present situation.

One of the key strategies to meet the women's needs would be to increase their possibility to earn an income by training them with management and construction skills. This could have been done at the building group level, where the members could later work as community contractors for other plot holders. Such an approach would have an emphasis on economic feasibility rather than on welfare aspects alone. Community cohesion could be achieved in this way at a project level, by teaching women the necessary skills. This would also increase women's confidence to apply their skills within the community. Later such groups could be used, for example, for maintenance purposes, in a long term community based employment scheme.

Housing Finance

As mentioned earlier it was assumed that the individual household would spend 20-25 -25% of its income on housing. The full provision of infrastructure and a wet core by the project left the construction of the dwelling to be implemented by the allottees themselves. This system assumed that adoption of both selfhelp approaches and gradual development of the house would reduce housing costs. Other considerations such as the letting of rooms was also thought to give the allottee an additional source of income. The main financial provision was, however, a materials loan, which was dimensioned to cover the costs of building materials only.

Problems soon emerged with this system. The inclusion of a full sewerage system constituted a very heavy tax on the allottees in general. It was also shown that selfhelp was difficult to implement since it required following conventional masoned construction standards. Furthermore, women exceeded their materials loan, since it did not take into account the time taken to build and the subsequent increase in cost of the building materials. Additional sources of finance were therefore necessary. All the women in the sample used a combination of financial methods and not one source alone, because no one source provided large amounts of money. Although some of them worked in the formal sector, thereby benefiting from loans given by employers and cooperatives, none of them obtained a bank loan as they were unable to fulfil credit institutions requirements; for example, they could not use the plot as collateral and this was one of the bank's requirements. The women who were self employed did not have many options other than loans or gifts from relatives and informal money lenders, who demanded very high interest rates. The several options used by the women throws an illuminating light on the strategies that low income women adopt in order to stabilise their housing situation, and certainly demonstrates that the project reality was not as clear cut and simple as planners assumed.

From the outset, subletting was planned as a strategy not only to provide an additional source of income, but as an alternative shelter solution for other low income groups, not eligible to be project beneficiaries. Partial subletting was accepted as a housing finance strategy - 60.4% of the women mentioned used their rental income for further construction. However, total subletting was not allowed under project regulations, but it occurred frequently as a means of achieving a total development of the plot and loan repayment. Once this existed it became difficult to distinguish between genuine total subletting that served the purpose of eliminating debt and the pure speculative subletting that attracted higher income

groups. The high mobility of allottees and the high degree of absenteeism prevented the detection of speculators, who moved in as pure absentee landlords. Absenteeism had already been estimated to be as high as half of the allottees (UNCHS 1983, 46).

In this study, it was found that there was a correlation for the women allottees between a plot being fully developed and total subletting. While it appears that total subletting is a strategy to maximise income for a period of financial pressure, women have the tendency to return to the settlement after they manage to pay off some of the loans. This is confirmed in a recent survey (UNCHS 1983, 46) carried out in phase 1. The study concluded that absenteeism amongst the women had declined and that the characteristics of the allottees was the same as during the plot allocation. However, during fieldwork I found that 28% of the women heads of household were still living elsewhere, while one allottee was suspected to have sold her plot. It can be argued that absenteeism amongst the women is a temporary phenomenon because the chance of obtaining a plot title would not exist for them anywhere else.

It was also found that undeveloped plots often belonged to women who had not utilised this option of subletting and indeed still resided on the plot. These were usually the sole breadwinners, with many dependants who had been unable to proceed with the plot development according to schedule. The fact that 55.8% of the women did not manage to consolidate their plots makes them vulnerable as landlords. The reluctance of tenants to rent rooms on a partially developed plot (without a gate and electricity) was mentioned by 23% of the women allottees. Tenants prefer to rent rooms in better consolidated plots which are mostly owned by men. Hence the chance of speculation is higher amongst men allottees.

Cost Recovery

Cost recovery is essential for sites and services projects. Nevertheless, charges should not take a disproportionate portion of the household income, if low income groups are to be reached. In Dandora both housing costs and income were rigidly calculated and there was no relationship between the two. Income concerned the wage of the household head and was considered to be a regular wage. Housing costs were determined by the standards set by the project. Both have been shown to be unrelated to the characteristics of low income groups.

From the 43 women interviewed, only 2 paid plot fees regularly. They had well developed houses and lived from a combination of subletting income and small scale business. Both were household heads, but had other adults contributing to the household. It was found that being in arrears had no relationship with household head income alone but did correlate with the possibility of subletting rooms and earning an income. The policy towards arrears is that action is only taken after six months of default; after this time warning notices are sent to the allottees and ultimately the decision of eviction rests with the Town Clerk on the advice of the project agency.

Social workers have the task of visiting the allottees who are in arrears in order to verify the reasons for non-payment. This visit with cooperation between the financial and the community development divisions. So far first notices have been given to twenty defaulters, of whom six were women. This action brought in an influx of payments, even from those with only one month arrears (personal communication with Ass. Dir. Financial Division). This suggests that strictly applied cost recovery may be quite viable, especially if better credit facilities help the allottees to complete their plot rapidly.

According to the same source, these allottees who are in arrears tend to be the absentee landlords, mainly men who only come at the end of the month to collect the rents. Moreover, in the sample I found that the second category of defaulters were those who could not pay monthly due to lack of regular cash flow. The majority of women are in this category. As mentioned earlier, women are often able to pay for their

debts once or twice a year, after harvesting (personal communication with Ass. Dir. Community Dev. Division).

The third category of defaulters were those who did not pay because of dissatisfaction with the level of services from the municipality. The failure of infrastructural maintenance by the municipality has had serious implications for the area as a whole. On one hand there is a severe drop in standards due to failures, e.g. drains are blocked by refuse dumping, leaking water mains are unreported and there is an absence of refuse collection. On the other hand the problem gets compounded by the negative and indifferent attitude of the residents. According to one woman, the failure of municipal services of refuse collection has led to a high turnover of tenants in her plot. The rubbish container was just near her gate, being a health hazard for the residents.

The lack of subletting income for the women who have not totally developed their plots as well as the high mobility of tenants has made the women decrease their rent charges, which certainly influences the rate of cost recovery⁸.

Altogether it seems that payments are allowed to lag behind schedule with little reaction from the project agency. However, some remuneration should be received from the allottees who do have a subletting income or a regular monthly income. By now project administrators are able to identify permanent defaulters and are able to judge who is able to pay. Therefore project staff should enforce regulations so that households which do not comply with the payment required should be penalised.

⁸The average rent charge in 1980 was between Ksh250 and 300. This amount dropped to Ksh180, which is hardly enough to pay the plot fees. In the 10% sample the average paid in plot fees was Ksh212.

V. Conclusions

Dandora project was very successful in reaching the lowest income groups. However, the various selection criteria revealed that planners and designers of the project had nuclear families and male heads of household in mind. The inclusion of women applicants appears to be an attempt at gender planning purely at the level of the implementing agency. However, despite the successful integration of women as project beneficiaries, women faced many problems during the implementation stage. If the objective of low income projects is to reach a target population, and to involve the residents in the provision of their own housing, then the concept of selfhelp must be carefully considered.

The selfhelp component in the project basically ignored the important contribution women make in the area of production and reproduction. Planners were primarily concerned with reduction in project costs and the result was that selfhelp often did not mean selfbuilt. When there is such a project component, it should be accompanied by extra loans to cover the costs for hired labour and the purchasing of building materials. Although expensive, women in several circumstances prefer to pay for a complete house instead of building gradually through selfhelp labour (Lycette and Jaramillo 1984).

Women allottees in Dandora are less likely than men to sell their plot for three reasons:

- (i)The project gave women the opportunity to own a plot in an urban area which was not possible before;
- (ii)Although both women and men tend to consider the house as an economic asset, women also see the house and plot in relation to their families and emphasise therefore the social value of the house and plot;
- (iii)The possibility of subletting rooms is very important for many women as it is often their main source of income.

Thus women in general and women heads of household in particular are the most stable group in the community. Their participation is crucial for the successful implementation of the project, and discriminatory practices against them, both in the area of credit within the conventional finance mechanisms and in the area of skills, must be removed.

Skill development is important in the housing delivery process, and it can also solve the employment component for women within the project. Future project planning should give more attention to training courses in building skills, by selecting women members of building groups for intensive training before construction starts. Thus equality between men and women could be achieved instead of the current welfare strategy. Such an approach would certainly enable women to change their roles in a productive way.

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