CHAPTER ONE

1.0 INTRODUCTION AND METHODOLOGY

1.1 Introduction

Hanna Nassif settlement is located in Kinondoni District, about 4 kilometres from the central part of Dar es Salaam City. It is an island of unplanned housing area surrounded by Kinondoni and Mwananyamala planned housing areas on the north and eastern sides, Msimbazi creek on the south and western sides. The settlement covers 50 hectares and accommodated 5045 households by May 1998, living in 1897 houses. The area was originally a coconut plantation that was abandoned by one Hanna Nassif. Former labourers in the plantation illegally built houses and subdivided the land and disposed it to new comers, most likely through selling. Depending on the size initially acquired, those who bought land, further subdivide their parcels and sell to other developers.

This second baseline study for Hanna Nassif phase II community -based infrastructure upgrading project was commissioned to the Department of Urban and Rural Planning, University College of Lands and Architectural Studies (UCLAS) in April 1998. The same institution carried out the first baseline study in 1994. Terms of Reference (ToR) (see appendix one) for the present study indicates that, "Though the study provides a lot of information, it is not going into enough depth." Moreover, as will be shown later in this chapter, there are methodological deficiencies inherent in the 1994 baseline study, particularly with respect to how the sampling frame for the household socio-economic survey was established. That deficiency limits possibilities of relating the 1994 with the 1998 data in, for instance, drawing conclusions on development trends, which is one of the requirements in the two objectives of the present baseline study, namely:

1) To provide sufficient information to assess the impact of the Hanna Nassif Project Phase II, after the project ends.
2) To analyse trends since 1994, and to assess the impact of interventions of Hanna Nassif Phase I.

The methodological deficiencies notwithstanding, attempts have been made to relate data from the two studies and on the basis of which conclusions are drawn. Beyond that, it is our hope that the present study provides sufficient information to facilitate assessment of the impact of the Hanna Nassif Phase II when the project ends in the year 2000.

As required by the ToR, the team undertaking this assignment had three briefing meetings with the Technical Support Team (TST) and a representative from ILO. In these meetings, methodological issues and instruments used in the study, such as questionnaire for socio-economic survey were discussed and agreed upon. Moreover, outputs such as updated (1998) base map, preliminary findings and conclusions were discussed with view to obtaining feedback from the client.

1.2 Methodology

The Hanna Nassif base line study was carried out through physical surveys, documentary analysis, quantitative, and qualitative methods. Engagement of all these methods was necessitated by the requirement of data on physical, socio-economic and institutional aspects.

A detailed physical survey was carried out to facilitate preparation of an up-to-date map of Hanna Nassif (May 1998), indicating existing buildings, road network and footpaths, constructed drainage system and electricity lines. The map became the basis for a property registration exercise which was carried out in the entire area with two basic purposes: to facilitate preparation of Hanna Nassif property register; and to establish a sampling frame for structured household interviews. Given those purposes, the property registration sought name and address of each property owner, number of households living in each residential property and tenure status of the occupants. Other data collected include: size of the residential property in terms of habitable rooms, building materials, availability of services, etc.

Besides providing the indicated data, the property registration provided a basis for establishing a household sampling frame comprising 5,045 households, from which a 5 per cent sample of households was systematically drawn for the structured interviews. This was done to ensure that each household had equal chance of being selected. If a household identified for the interview was found to reside in a compound which had other households, then all households in that property were interviewed. That way, we ensured that both tenants and owners were given equal representation. The questions were administered to the heads of the selected households.

Whereas the 1998 sampling frame was based on households found living in the properties registered during property registration exercise, the 1994 base line data study sampling frame was based on houses as shown on the 1992 aerial photograph. However, by 1994 when the base line study was carried out, the 1992 map was already out-dated. Moreover, it would be impossible to distinguish which buildings belong to one plot or ‘compound’ and thus counted as one property or separate properties. The property registration exercise for this study revealed that some properties which on the map appeared to belong to two different owners were outer buildings belonging to the same owner, implying that in the absence of the property registration, one would hardly know this. Property count based on the map would therefore be misleading and so might have been the 1994 household sampling. It follows therefore that, the differences in what constituted the sampling frame and how this was arrived at underlie the difficulties in identifying changes that had occurred in Hanna Nassif by comparing the 1994 and 1998 base line data.

A 100 per cent registration of formal and informal micro enterprises operating in Hanna Nassif was carried out in August 1994 seeking data on the type of activities, location within the settlement, year of establishment, source of the initial operating capital, etc. The 340 enterprises found operating in the settlement were categorized according to the type of activities carried out, and then a 10 per cent sample was drawn for interviews with the entrepreneurs. This was intended to provide additional data on the enterprises, especially why they were established in Hanna Nassif, and how they have been growing.

Data on the institutions involved in the upgrading project was obtained from an analysis of various reports and interviews with key persons in the institutions, namely: Community Development Association, Technical Support Team and Dar es Salaam City Commission.

In accordance to the ToR the 1998 baseline study is presented in the following outputs:

1. Updated land-use map (May 1998) of the settlement in 1:1000, indicating building uses, community facilities, physical infrastructure and their conditions (water supply, roads, footpaths, storm water drains and areas prone to flooding), solid waste dumping sites and sanitation systems.

2. Besides the up-dated land use map, the physical survey facilitated preparation of a register of property owners in Hanna Nassif settlement indicating their names, addresses, tenure status of each residential property occupants and occupancy rate.

3. A summary report, based on five per cent sample of the households, indicating social and economic status of the residents, and, observations on the changes that have occurred since 1994. The changes are analyzed in relation to Hanna Nassif phase I project, as well as the situation in similar settlements in Dar es salaam city. Moreover, the report contains observations on capacity building of the institutions involved in the project.

1.3 Project Area and Physical Boundaries

Hanna Nassif Settlement covers an area of approximately 50 hectares, that includes the main settlement (outside the flooded zone), part of Msimbazi River flood - prone valley and, in steep slopes just beyond the main settlement's south-western and southern boundaries (See Map. 1.1). Administratively, the settlement forms part of Mkunguni and Hanna Nassif '*Mitaa'* or Sub-Wards in Kinondoni Ward. The boundary of the settlements is well established on the northern side and the North-Eastern part by the Kawawa Road and the adjacent planned areas respectively. The settlement's boundaries are still ambiguous however, with regard to the valleys/flooded zone in the south and southern parts.

The problem of unclear physical boundary is further compounded by what is termed as the "project (upgrading) area", to which no clear reference has been established (e.g. to link the settlement with existing physical and/or infrastructure boundaries). Further, difficulties are also inherent to link these boundaries with past studies on the settlement e.g. with the 1994 Community Infrastructure Programme (C.I.P) study reference area and, therefore, rendering comparability difficult.

In this Baseline study, the settlement is defined by the following boundaries:

- The boundary of the settlement is established by taking the landform (in South-Western and southern part) where the slope changes (between 4m and 10m a.s.l.). It considers houses located on the steep slopes fringing the settlement on south and South-western part and the currently severely eroded parts.
- The lowest point before the flood plain (4 m a. s .l. and below), which forms the boundary of the flood plain, is excluded from the project area (see Map 1.1), because it experiences extensive flooding; being part of the larger Msimbazi River valley.
- Above 12 m a. s. l. is the main settlement area and the main Project area which forms a plateau-like zone and is currently densely built. After the phase I upgrading, main part of this settlement area which was originally severely affected by floods is now drained; and the effect of floods have subsided substantially.
- Northern and North - eastern boundaries remain the same as those described under the CIP study (1994), which is the part of planned area and Kawawa Road respectively.

- The overall area excludes Block 'G' in the North-eastern arm of the settlement (after the Hanna Nassif Primary School). This area was included in the 1994 C.I.P. study-as well as in this study, for comparisons. However, most of this area is in the currently flooded zone and is therefore excluded from the present project area.

1.4 General Project Background: Hanna Nassif Community-Based Upgrading Project Phase I

There are more than 44 unplanned settlements in Dar es Salaam City which are characterized by the general lack of essential services, infrastructure and facilities (CIP, 1994). Being one among these settlements Hanna Nassif a population of about 19,000 people in 1994. The settlement has been experienced flooding during rainy season due to absence of drainage channels. Some houses fell down as a result of flooding effect. Before upgrading project phase I it was difficult to move from one place to another due to absence of reliable circulation network. At the same time uncollected solid wastes and over spills from pit latrines mixed with rainy water, created unhealthy living environment of the low-lying zones of the settlement.

In order to address these problems, a pilot project on community-based employment intensive infrastructure upgrading of the settlement was initiated under the donors' supervision. Before commencement of the project, meetings were convened to elect the Community. Residents organized themselves to form an elected local Community Based Organization known as Community Development Committee (CDC) in 1993.

The basic concept of the project was to empower the community to create and develop its own infrastructure with the assistance from various agencies. The idea was to launch a pilot project and use the experience in other similar urban settlements.

The development objective of the project was defined as improved living conditions and expanded employment opportunities in urban settlements in Dar es Salaam (ILO, 1993). From this overall objective, three immediate objectives were formulated in order to achieve the development objective. According to the project document, the three immediate objectives were:

(i). A pilot project on Community Based employment intensive storm water drainage infrastructure upgrading of the Hanna Nassif informal settlement.

(ii). The capacity of the Dar es Salaam City Council to continue to deal in a responsive, enabling manner to Community Based urban upgrading projects be created and expanded.

(iii). Support mechanisms for Community Based Initiatives from Kinondoni settlements, involving a network of Community Volunteers.

Emanating from these objectives, the following activities were earmarked for implementation.

(i). Improvement of a 2.5 kilometre road with lined drains
(ii). Improvement of 1.5 kilometre lined drains
(iii). Construction of 1.5 kilometre footpaths
(iv). Construction of 11 protected points for drainage discharge into Msimbazi creek.

(v). Construction of 10 road drifts and 15 footpath culverts
(vi). Secure protection to existing gullies in the settlement

The beneficiaries of the project were firstly the CDC and residents of Hanna Nassif and the Dar es Salaam City Council. The improvement of road network and drainage would provide access to the otherwise in accessible areas and relieve low-lying houses from frequent flooding. The DCC would emulate Hanna Nassif experience and replicate it to other unplanned areas in a sustainable way. Besides, the capacity of the DCC to respond to similar cases would be built.

The project was planned to be implemented within a period of 18 months starting from March 1994 to August 1995. However, it was further extended for six months to March 1996 to facilitate completion of some construction works. The total cost of this project was estimated at US$ 608,000 plus some T.shs. 24,000,000 which was supposed to be locally raised by the CDC and the DCC.

The actors and organizations involved in this project ranged from the Community Development Committee, international organizations, private firms and individuals and the city authorities as indicated in table 1.1 below.

Table 1.1: Actors and Organizations Involved in the Project Phase I

S/No.	Actor/organization	Role played in the project
1.	The Community Development Committee (CDC).	• Beneficiary and implementors of the project activities. • Responsible for operation and maintenance after completion of phase I.
2.	Dar es Salaam City Council (DCC) now Dar es Salaam City Commission.	• Provision of Technical Personnel to build capacity of the CDC. • Adapting of experience from Hanna Nassif pilot project to other unplanned settlements.
3.	ILO	• Executing agent responsible for promotion of employment and participatory strategies in infrastructure works, skills training building materials and small-scale enterprise development.
4.	UNCHS Habitat)	• Associated agency responsible for supporting the local government in the implementation of enabling affordable and sustainable human settlement policies with particular attention to planning.
5.	UNV (United Nations Volunteers)	• To support the community to mobilize, identify needs, establish sense of ownership and increase their bargaining power with public authorities and promote local initiatives through community voluntarism and networking.
6.	Ford Foundation, European Development Fund (EDF) Micro Projects and LIFE (Local Initiation Facility for Urban Environment)	• Financial support
7.	Private Firms and Consultants	• Provision of consultancy services.
8.	Residents of Hanna Nassif	• Payment of contribution to the project i.e. by cash and kind, Beneficiaries of the project, Responsible for actual construction and maintenance works
9.	The Steering Committee	• Coordination of all activities carried out by organizations involved in the project.

The Community Development Committee and the residents of Hanna Nassif were responsible for the implementation of the project. While the CDC was the central body to lead the day to day operation of the project activities, residents of Hanna Nassif were responsible for contributing to the project by providing both free and paid labour and paying contribution as was indicated in the project document. The community was expected to raise Tshs.80 million in cash or labour as a 5% match to the donor support.

Activities which were implemented as at the end of project phase I include:

One kilometre murram road with lined side drains was constructed to acceptable standards, one and a half (1.5) kilometre side drains and 600 metres main drain. About 700 metres footpath along the main drain and road No. 1 were improved. Two major outlets for drainage discharge into Msimbazi creek were constructed. More than 10 road drifts and 10 vehicular culverts crossing the main drain and road No. 1 were constructed.

Apart from these physical achievements, training in skills was carried out through workshops and seminars. Eight workshops were conducted and training materials like video, construction and maintenance guidelines and plans were prepared.

1.5 General Background: Hanna Nassif Community-Based Upgrading Project Phase II

The second phase of Hanna Nassif upgrading project took off in May 1997 and will last for three years. Under this phase, specific project activities have been outlined as:

- Provision of training in community based infrastructure upgrading to five City Commission Staff members and two private firms
- Preparation of a training manual- giving step by step guidelines for replication of the process in other settlements
- Enhancement of capacity of at least two local contractors or NGOs to work with community and employment intensive construction methods.
- Establishment of an effective management procedure and financial system.
- Preparation and make available implementing procedures and standard contracts.
- Construction of 2162 metres of main drain storm water drainage channels.
- Construction of roads and drainage of the following approximate lengths

(a) 2 km gravel road
(b) 35 road crossings
(c) 4km side drains and side walks
(d) 25 foot bridges.

- Construction of water supply system consisting of 10 water points.
- Creation of employment of total 50,000 workdays (skilled and unskilled).
- Establishment and application of operation and maintenance procedures for created assets.

The main actors and partners under Hanna Nassif project phase II are as indicated in table 1.2 below.

Table 1.2 Actors and Partners in Hanna Nassif Project Phase II

Sr no.	**Actor/organization**	**Role**
1.	The community Development Association (CDA)	• Beneficiary and implementors of the project • Responsible for operation and maintenance after completion of phase II as was in Phase I.
2.	Dar es salaam City Commission (DCC)	• Provision of technical personnel • Coordination of actors • Adapting experience to other settlements
3.	The National Income Generation Programme (NIGP)	• Financing of the project
4.	University College of Lands and Architectural Studies (UCLAS)	• Executing Agent
5.	The International Labour Organisation (ILO)	• Associated Agency • Technical support
6.	Ford Foundation	• Financial support- (Micro-credit scheme)
7.	Residents of Hanna Nassif	• Beneficiaries of the project • Responsible for actual construction and maintenance Contribution to the project

CHAPTER TWO

2.0 PHYSICAL AND ENVIRONMENTAL PROFILE: 1998

2.1 Infrastructure Condition

The infrastructure components that will be discussed in this section include road network, drainage system, electricity, telephone services, sanitation systems and solid waste management. Under each component, the existing condition is elaborated particularly on issues related to adequacy, quantity and quality. A comparison of the situation as observed in 1998 and that of 1994 is also made.

2.1.1 Road Network, Conditions and Accessibility

(i) Road Network

The road network within the settlement is made up of three categories. These are:

- **Main Access Roads**

  There are three roads which fall into this category. Firstly is the major entrance to the settlement runs from Mkwajuni bus terminal eastwards slightly more than half a kilometre inside the settlement (Map 2.2). This road is now passable throughout the year after it was improved i.e. upgraded to murram surface and lined side drains. The road's right of way varies from 6-10 metres. The variation was respected during improvements in phase I so as to avoid demolition of buildings. The second main access road runs parallel to road No. 1, bisecting the settlement into two equal parts. Part of this road, about 350 metres, was also improved in phase I. Thirdly is road No. 3 which is the longest in the settlement. It has been earmarked for improvement under the second phase of the project. This road terminates from road No. 1 (a few metres from Mkwajuni terminal), traversing southwards and then back to road No. 1. It is a long loop from which minor access roads terminate. Despite functioning as one of the important roads in the settlement and also the longest, its surface condition is not good. It is an earth road characterised with potholes and due to lack of side drainage, the eastern section which is on the low lying side, also acts as a drain for storm water run-off collected from the western side of the settlement. The latter is in danger of being eroded totally. If immediate actions will not be taken, this section will not be passable in the near future.

- **Minor access roads**

  Minor access roads are scattered throughout the settlement providing vehicular access to individual or groups of houses. Predominant ones include a north-south access road starting from road No. 1 and ending at the south western part of the settlement and connected to road No.3. The section which link road No.2 and No.3 has been earmarked for improvement under the second phase of the project. All minor access roads are earth surfaced and lack drainage channels making stagnant water pools a common feature especially in the low-lying central areas. Many sections of the minor access roads have right of way ranging between 5 and 10 metres.

- **Footpaths**

Footpaths are found almost everywhere in the settlement. In fact all houses which are not accessible by cars including those in the steep slopes of Msimbazi creek and the flood plain of Msimbazi are served by footpaths. Very few houses are fenced in Hanna Nassif and therefore even alleyways in this regard are used as easements to footpaths connecting housing areas. Important paths include a footpath traversing from the southern tip of the settlement via the CCM office running northwards across road No.3 and finally joining an access road towards road No.2 (See Map 2.1). Another footpath is that which traverses along the main drain terminating from road No. 1 running south westwards to road No.3 where the outlet of the main drain to Msimbazi valley has been built. All footpaths are earth surfaced and have varying widths ranging from 1 metre (especially the alley-ways) to 5 metres at the widest sections.

(ii) Accessibility

Out of 1897 houses which were registered under the housing registration survey, 59.7% had no vehicular access. They were therefore accessible by footpaths. This observation compares fairly well with the results of the 1994 study which revealed that 56.4% of the houses were not accessible by vehicles.

Since the existing roads are now passable throughout the year as a result of the upgrading project, accessibility to properties served by the improved roads has been improved. There has been no public bus service within Hanna Nassif settlement before and after settlement upgrading. The only public transport available has been taxi transport. Before implementing Phase I of the project, particularly the improvement of road surface condition, taxi drivers refused or charged more to enter the inner part of the settlement because of poor road condition. The improvement of roads No. 1 and 2 has opened up the central part of the settlement to vehicular accessibility, thus facilitating easy taxi movement and other vehicles in the settlement even during rainy seasons. However, in general terms, vehicular accessibility to housing areas that had no access roads has not been improved mainly because the upgrading project did not open up new roads.

The improvement of road condition within the settlement has created a source of income to the community. This has been so after introducing road tolls at two entrance points, where Tshs 430,000 was collected per month. With that amount, it has been possible to pay labourers cleaning the main and side drains, purchase of road surface gravel, office stationary and transport as well as paying those attending the toll stations. The City Commission has, however, suspended collection of road toll in the settlement as at the end of July 1998.

2.1.2 Drainage Systems and Condition

(i) Drainage System and Condition

The existing drainage system for Hanna Nassif area comprises two categories namely:

- **The main drain**

Covers a total of 650 metres The main drain traverses through the central parts of the settlement northwards and there after deflected eastwards towards the Msimbazi valley (refer map 2.1).

- **The side drains:** These are lined drainage channels along road No. 1 No.2 covering a length of 1000 metres.

The drains are generally in satisfactory structural condition. However, they are poorly maintained because they lack regular cleaning and garbage dumping into these drains is apparent. In some instances, fouled water is discharged into sections of the storm water drains. The uncovered sections of the main-drain down-stream where its depth exceeds one metre poses a danger to pedestrians, particularly children.

Before implementing phase I, more than half of the low-lying central area of the settlement got flooded during rainy seasons because of lack of drainage channels. The 1994 study shows that house owners were spending up to about Tshs. 8,000/= per annum for minor repairs of their properties caused by floods. On average, medical expenses in connection with water borne diseases amounted to Tshs 15,000 per year per household. Although the flooded area was not totally drained after phase I of the project, the physical inventories conducted in April, 1998 revealed that flooding of the low lying central area has been substantially controlled. Residents of the central part of the settlement have directed storm water via small channels to the nearby main drain. For example the heavy rain of Sunday May 3rd, 1998, which caused flooding in several parts of the city of Dar es salaam did not affect the central part of Hanna Nassif. Only temporary water pools were experienced but these were easily drained into the main drain.

(ii) Incidences of Diseases

Although there are no well documented statistical data on the state of incidences of malaria and other water related diseases before and after phase I of the project, seemingly, the construction of the storm water channels has resulted into reduction in the number of, and the threat to such diseases. Discussion with the Kinondoni Moscow Women Development Association (KIMWODA), a CBO which has been subcontracted to clean the drains, indicated that that there has been a decrease in the incidences of such diseases. For instance there was no incidence of cholera in the area, the epidemic disease that spread to many areas of Dar es Salaam city during the March -June 1998 rainy season. Statistics from two dispensaries from Hanna Nassif show that from 1994 to 1998, the frequency of waterborne and water related diseases (i.e. malaria, diarrhea, dysentery and cholera) is decreasing (refer table 2.6).

Similarly, the social economic surveys conducted in June 1998 revealed that out of 262 interviewed households, 36.6% experienced sickness as caused by in-sanitary condition. The rest did not. Majority of cases was malaria, a disease which is experienced even in non flood-prone areas of Dar es Salaam. The same socio-economic survey revealed that out of 136 respondent households, 86 cases or 63.2% suffered from malaria, 29 or 21.4% were cases of diarrhea and 21 cases or 15.4% Red eyes and other diseases. Majority of these cases occurred only once for the period of two years.

The socio-economic survey, however did not assert the decreasing trend of occurrences of waterborne diseases. Out of the 184 households that responded to this question, 8 households or 4.3% conceded that there was an increase while 158 households or 85.9% observed that there was no change. Although this observation does not provide a significant statistical basis for concluding that there is a decrease on incidences of diseases, the physical observations in the area suggests that the project has contributed in improving the public health situation in Hanna Nassif.

(iii) Extent of Flooding in Hanna Nassif

The 1998 physical inventories reveal that the flooding problem in the central areas of the settlement has been substantially reduced after the construction of the main and side drain. In fact even those areas where lateral and minor drains are yet to be constructed were not flooded because storm water was directed into the main drains. The socio-economic survey revealed that only a few household i.e. 66 or 24.5% of the sample size complained of persistence of floods and poor drainage and 30 households or 11.2% for the flooded latrines.

The 1994 study indicates the central part of the settlement (See Map 1.1) as prone to flooding. The area between 4 - 12 metres are the steep slope areas of the Msimbazi creek. These areas were categorised as severely eroded. However, the 1998 physical inventories did not show evidence of a house being washed away by erosion.

The fact that poor drainage and/or flooding problem does not feature prominently as a priority problem from the opinion of the respondents, despite being the key aspect of the upgrading project intervention, suggests that generally there is more satisfaction among the inhabitants on that issue as compared to situation before 1994.

2.1.3 Electricity Supply

Findings from the housing registration survey revealed that out of the total 1897 houses that were registered, 858 houses or 45% had electricity connection by May 1998. The remaining 55% are yet to be connected. Studies that were conducted in 1994 revealed that 76% were connected to electricity. In fact majority of the houses in Hanna Nassif are yet to be connected to electricity supply contrary to the survey results of 1994. The service level for the settlement is not different from other unplanned settlements in Dar es Salaam. However, electricity provision was not included under both phases of the project.

2.1.4 Water Supply

(i) Water Supply Condition

The source of water supply for Hanna Nassif is the water main traversing through the settlement to Kinondoni Area. The housing registration survey (May 1998) revealed that out of 1897 houses, 373 or 20% had private water connection, 149 houses or 8% had plot connection (single tap in their plot) and the remaining 1375 or 72% had no water connection. People living in houses with no water connection relied on nearby houses for their daily demand. The pattern of house connection to water supply portrays a similar trend as that of 1994. (See table 2.1 below).

Table 2.1 Water Supply in Hanna Nassif Settlement

Type of Connection	1998 % Total Houses	1994 % Total houses	Remarks
House Connection	20	18.8	In house water network
Plot Connection	8	39.1	Single tap in the house
No water connection	72	41.8	41.8% were buying water from nearby sources

Source: CIP (1994), UCLAS 1998.

Findings from the 1998 studies show that the area does not experience frequent water shortages either from rationing or low pressure. The 1998 socio-economic surveys revealed that 60% of the total respondent households experienced water shortage only once in a month. In 1994, 63.3% of the interviewed households experienced a water shortage within the same period. Thus the 1998 trend of water supply is more or less the same as that of 1994. Majority of the residents get their water for domestic use from within the settlement. In case of shortage, residents get water from nearby neighbourhoods of Mwananyamala, Magomeni and Kinondoni; which are on average, about 1 kilometre away. Under the second phase of the project the main pipes will be constructed and water kiosks installed to further improve the water situation within the area.

(ii) Water Consumption Pattern

The 1998 consumption pattern of water supply revealed that about 34% of the sample population were using below 100 litres per day, 43% between 100 - 200 and 15% between 200 and 250 litres. This does not reveal any change in terms of consumption pattern as compared to that of 1994. The 1994 survey results revealed then was that 47.9% of the sample population used less than 100 litres or less than 5 buckets per day; 40.5% used 101-200 litres per day, 7.2% between 201-250 litres per day and 4.5% above 250 litres per day. Table 2.2 summarises the consumption pattern of water supply within the settlement between 1994 and 1998.

Table 2.2 Water Consumption Pattern

Amount of water in Litres	1994 (%)	1998 (%)
Less than 100	47.9	34
101-200	40.5	43
201-250	7.2	15

Source: and CIP Report (1994) and UCLAS (1998).

The similarity in consumption trends might be due to the fact that no major improvement has been effected on water supply system, particularly the distribution network and the general development pattern of the settlement.

(iii) Expenditure on Water Supply

Residents in Hanna Nassif have been spending up to Tshs. 5,400 per month on water supply. This expenditure pattern does not suggest inability of any households to pay for water supply. The fact that water is sold at Tshs.10/= per bucket of 20 litres may lead to the conclusion that the settlement is relatively better in terms of water supply than many unplanned or even

planned settlements in the city where 20 litres of water may cost up to Tshs 200. The expenditure pattern on water supply is as shown in Table 2.3 below.

Table 2.3 Monthly Household Expenditure on Water Supply (1998)

S/N	Amount Per Month	No. of Households	% of Sample
1.	Below 1500	71	32.1
2.	1501 - 3400	89	40.3
3.	3401 - 5400	7	3.3
4.	+5401	54	24.3
	TOTAL	221	100%

Source: Socio-economic Survey, UCLAS, June 1998.

In 1994, 41.8% of the total population were buying water at Tshs.5/= per bucket of 20 litres. This situation was however better compared to Temeke District where residents were buying water at Tshs 200 for the same bucket of water, the situation which has prevailed until today. This shows that Hanna Nassif settlement has a relatively better water supply system than many other similar settlements within the city.

2.1.5 Telephone Services

The 1998 survey further revealed that out of the total 1897 houses, only 51 or 2.6% were having telephone connection. The rather few telephone connections, which is also found in other settlements in the city is attributed to the low supply capacity of telephone system in the city compared to effective demand. Starting from February this year, the Tanzania Telecommunication Company Limited (TTCL) received many applications city wide following their proposal of phased payment for telephone connection. But the company simply cannot cope with the huge number of applications. Despite the expansion of its network capacity in some parts of the city, majority areas in Dar es Salaam are yet to be provided with adequate number of telephone lines. Although there are no statistics to confirm this observation the general experience shows that telephone connections charges are as high as Tshs 100,000, (minimum), an amount which is considered un-affordable to many households in Hanna Nassif. There are no established comparable figures from the 1994 baseline study.

2.1.6 Sanitation

Majority of the houses in Hanna Nassif use pit latrines. Out of 1897 houses that were registered, only 128 or 6.7% were having water closet and septic tanks type of sanitation. A bigger proportion i.e. 1758 houses or 92.7% had pit latrines. The remaining less than one percent had no sanitation at all. Households without toilet facilities normally use neighbours toilets.

In a densely built up areas like Hanna Nassif, and in the central part of the settlement where the extent of flooding has been reduced the use of pit latrines is problematic because it contributes to the possibilities of polluting underground water. The present study indicates that one among the problems facing residents of Hanna Nassif is that of flooded latrines. About 11% of the sample households have been experiencing this problem. Although there are no statistics from the 1994 study to facilitate comparison, recent observations in the settlement suggest that this problem has been reduced concurrent with reduction of flooding effects.

2.1.7 Solid Waste Management

Most of the solid waste generated in Hanna Nassif is organic in nature. Both the 1994 and 1998 studies show that there were no households who were sorting waste before disposal. The disposal areas for solid waste is as shown in Table 2.4 below.

Table 2.4 Solid Waste Disposal Areas 1994 and 1998

Disposal Area	% Population 1994	% Population 1998
Open pit	39.0	19.0
Public space e.g. roads,	20.5	-
In containers	21.3	0
Msimbazi valley	15.5	73.0
Other disposal sites	3.7	8.0
TOTAL	**100**	**100**

Source; Socio-economic survey (1998) and CIP Report (1994)

It is clear from the above table that open pit dumping has decreased from 39% in 1994 to 19%. Dumping in the containers is no longer being practiced but the dumping of waste along the Msimbazi valley has increased from 15.5% in 1994 to 73% in 1998. This increase is mainly because of lack of municipal trucks to collect waste from the settlement. Also, the waste collected by the Women Group within the settlement is dumped along the same valley (See Map 2.1).

The present study shows that peoples' priority in settlement improvement has changed from that of drainage as indicated on the 1994 study to solid waste collection. Solid waste collection ranked highest followed by roads and drainage, as illustrated in table 2.5 below.

Table 2.5 Priority improvement actions in Hanna Nassif Settlement

Priority Area	% Sample Population
1. Solid Waste Collection	38.4
2. Roads and Drainage improvement	35.8
3. Public Water taps	15.2
4. Planting trees	10.6
Total	**100%**

Source: Socio-economic survey, UCLAS, June (1998).

This change in priority is not unexpected following the provision of storm water drainage system during the first phase. As indicated earlier that improvement has greatly improved the hitherto flooding problem, thus making the provision of drains of relatively less importance.

Furthermore, the present study shows that women groups have ventured into waste collection as an income generating activity. For instance, the Kinondoni Moscow Women Development Association (KIMWODA) collects solid waste from households and charges a fee of Tshs.200/= per trip of hand pulled cart. About 300 houses are visited by KIMWODA twice a week to collect waste from their premises. This activity provides employment to 4 members of the group. The collection of household waste by paying the service charges indicates that the increasing population has probably caused a corresponding increase in waste production which can no longer be dumped crudely within the sites. As outlined above, this may also be attributed to the densification of houses which has shown increasing trend over time.

In 1994, commercialized waste collection was only limited to public buildings such as market and restaurants whereby market vendors hired hand pulled carts to collect waste from their premises. Presently, this trend has been expanded to residential areas.

The problem which seems to undermine private waste collection by the women group is the absence of a disposal site. Originally, KIMWODA was disposing waste into one site located on the eastern side of the settlement. This site which was severely affected by gully erosion was chosen for filling up as a strategy of filling up the gullies. The site has been already filled up / reclaimed. The women group is currently negotiating for an alternative site for waste disposal to the eastern part of the settlement near the slopes of Msimbazi valley. Although the site chosen temporarily accommodates the waste collected from the settlement, it poses some health risks because it is located too close to the surrounding dwelling units. Phase II of the project aims to tackle the problem of solid waste management through NGOs and the DCC.

2.2 Environmental and Health Related Diseases

This section discusses the state of sanitation and health condition of residents. The discussion is centred on the level of sanitation and waste management as a pre-requisites for public health. Residents opinion on the incidences of health related diseases is also explored.
The 1998 survey shows that only 19% of the households dispose their solid waste in open pits dug near their houses and along roads. This is a significant environmental improvement in terms of solid waste management, when compared to the situation before Phase I of the project i.e. 1993/94. At that time 60% of the residents disposed solid waste on open pit and along public spaces e.g. roads. Coupled with the flooding during the rainy season, the state of environmental hygiene and risk to water related diseases was more threatening than at present times. In 1994 the DCC was not collecting waste from this area and flooding contributed to the spread of polluted water. Stagnant pools of polluted water remained within this area forming breeding places for mosquitoes and other disease vectors. As such, residents of this area were much more susceptible to diseases like Malaria, diarrhea, dysentery, cholera, etc.

Although statistics on the incidences of water borne diseases in the settlement is yet to be well established, there has been unsubstantiated observation that the frequency of such disease is decreasing. A statement notes,.... "*there has been almost no incidence of cholera in this area during the just ended rainy season (March to June 1998), the epidemic which was spread throughout the city*". At household level, it was observed that no change have taken place in the four year period although they appreciated improvement in terms of environmental sanitation. When pursued further on the reasons for the said decrease on the occurrences of such diseases, 23.2% or 36 households accounted for cleanliness of the environment, 33.6% said that there were no more foul water and floods. A few households i.e. 7 representing 45 of those who responded that there was an increase in the incidence of diseases as being caused by the increase of mosquitoes. Statistical records from two dispensaries within Hanna Nassif settlement also show this trend as summarised in table 2.6 below

Table 2.6 Reported Cases for Water Related Diseases in Hanna Nassif (1994-1998)

Water related disease	**Hanna Nassif Bakwata Dispensary**					**Bakwata Charitable Dispensary**				
Years	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Diarrhea	48	17	51	10	11	70	40	20	90	200
Cholera	-	-	-	-	-	300	400	302	500	200
Dysentery	69	32	77	45	8	3	7	2	4	-

Malaria	170	108	179	94	101	3520	4000	3000	5001	2000

Source: Bakwata Charitable Dispensaries, Hanna Nassif, 1998.

While at city level has been observed that infections diseases like malaria accounted for 350,000 reported cases per year, diarrhea, respiratory diseases including tuberculosis doubled in numbers between 1980 and 1990. Table 2.7 below indicates the slight increase in water related diseases at city level.

Table 2.7 Percentage of Water Related Diseases in Dar es salaam City (1991-1995)

Sn	Water related disease	Percentage of occurrences of total diseases		
		1991	**1994**	**1995**
1	Diarrhea	9.3	11.89	12.06
2	Dysentery	-	0.35	0.02
3	Cholera	-	-	-
4	Schistosomiasis	-	1.28	2.09
5	Malaria	24.8	37.22	35.45

Source: JICA (1996).

Though statistics on incidences of cholera were not available, the number of reported cholera cases at city level has risen considerably since 1990 reflecting the deterioration of sanitary and environmental condition. The factors contributing to this situation include stagnant water, flooding in low-lying areas, stagnant water caused by blocked drains, overflowing unsanitary wastes, pollution of ground water sources. Similarly, insect and rodent carried diseases increased within the same period as a result of among other reasons, the un-collected solid wastes.(DCC/UNCHS-Habitat, 1992). This observation seems not to apply in Hanna Nassif Settlement suggesting that the improvement of the area through provision of storm water channels has not only reduced the flooding effect but also contributed to the decrease in incidence of diseases.

2.4 Social and Community Facilities

The social and community facilities that will be explained in this section include nursery and primary schools, dispensaries and religious institutions like churches and mosques. Statistics from the present study shows that there were 3 churches, 4 mosques, 5 dispensaries 2 primary schools and one community development committee office. There has been a slight increase in the number of these facilities when compared with those of 1994. However, there is no evidence suggesting that such increase is a result of the upgrading project. Table 2.8. below provide a summary of facilities which were available in 1994 and 1998.

Table 2.8. Number of Social and Community Facilities (1994-1998)

S/NO	Facility	1994	1998
1	Primary School	2	2
2	Churches	2	3
3	Mosques	6	4

4	Nursery School	2	-
5	Dispensaries	4	5

Source: CIP(1994) and UCLAS(1998).

2.4.1 Primary Schools

The number of primary schools has remained the same i.e. 2 primary schools of Juhudi and that of Hanna Nassif. The current enrolment for Juhudi Primary School is 940 pupils and that of Hanna Nassif is 1885. These figures are more or less the same as those of 1994 which were observed to be 940 for Juhudi and 1893 for Hanna Nassif Primary schools. The non - increase in pupil enrolment is attributed to the non extension of the classrooms for the two primary schools. Table 2.9 provide a summary of pupils enrolment for the years 1994 and 1998.

Table 2.9 Enrolment of for Juhudi and Hanna Nassif Primary Schools (1994 and 1998)

School	**Juhudi Primary School**		**Hanna Nassif Primary School**	
Year	**1994**	**1998**	**1994**	**1998**
Total number of pupils	940	940	1893	1885
Number of teachers	21	24	35	41
Number of classes	6	6	19	21
Enrolment capacity	180	180	1140	1260

Source: Juhudi and Hanna Nassif Primary Schools (1998).

The enrolment rate of Juhudi Primary Schools has remained the same since 1994 mainly because of limited space for physical expansion. The present premises of the schools is confined to only the 650 square metre plot surrounded by houses making it difficult for spatial expansion of classes and offices. Hanna Nassif has a relatively larger area and between 1994 and 1998, two additional classrooms were built to relieve congestion of pupils.

In both primary schools, however, the enrolment rate exceeds the recommended enrolment capacity for primary schools. For example Juhudi primary school enrols a 940 pupils accommodated in 6 classes. Student have been forced to attend classes on shift bases due to limited space for classrooms. There has been a population increase within and the neighbouring areas of Hanna Nassif between in 1994 and 1998. This increase would automatically have a bearing on the existing condition of these primary schools.

2.4.2 Nursery Schools

The present study shows that there was no registered nursery schools. Discussion with residents of Hanna Nassif revealed that the nursery schools available were run by individuals and mostly within their housing compounds. These included a nursery school at Magongo's house, a school that was run by the Kinondoni Moscow Women Development Association but later on closed, one at Mzee Burura's house, a school near the present market, one run by the Pentecost Church and one operated at Juhudi Branch CCM office building. The 1994 study identified two nursery schools which seems to have been closed. The absence of Nursery schools within the settlement implies that either residents have to travel longer distances outside the settlement to seek for their children's nursery education or not sending them at all.

2.4.3 Religious Institutions

The 1998 survey recorded 3 churches and 4 mosques. When compared to that of 1994, the number of churches has increased from 2 to 3 while the mosques have decreased from 6 to 4. The churches identified within the settlement include the Lutheran Church, Pentecost and African Inland Church. There are other Christian denominations which conduct their prayers in the buildings of Juhudi Primary School.

2.5 Land Use and Spatial Development of the Settlement

The main use of land in Hanna Nassif is residential. The housing/property registration carried out 1998 indicates that 89 % of the total buildings registered are used for residential purposes, 10% for both commercial and residential uses, and only 1 % forms pure commercial properties. Compared to the 1994 situation, the land and building use structure of the settlement has basically remained the same; except the commercial-residential category which has increased modestly, from a figure of 6.7 % in 1994. Visible changes in the land/building uses and the densification of the settlement include: Building extensions on plot, the densification of the 'compound' categories (clusters under the same ownership), completed new buildings and replacement of the originally temporary residential structures with permanent commercial or other uses (Refer map 2.3, building and land uses).

Other developments and land uses in the settlement include areas provided for institutions, community facilities, commercial and informal sector/small businesses along the Kawawa Road and some along roads and paths in the settlement. In addition, there are vending activities, service oriented small-scale industrial operations: carpentry workshops, milling machines, repair services, etc. (See Chapter 4) which together represent a small proportion (about 3 %) of the total buildings/structures in the settlement.

Overall, the settlement is densely built with a density of about 40 houses per hectare. There is generally insufficient open spaces between the buildings. At the same time, building construction has intensified in the flood prone zone. That density is comparable to that of similar unplanned settlements in Dar es Salaam.

Development of informal housing in Hanna Nassif has been steadily increasing between 1974 and 1998 as shown below:

Table 2.10: Housing Development In Hanna Nassif: 1975-1998.

Year	1974	1975	1982	1988	1992	**1998**
Houses/properties	955	1200	1316	1640	1888	1897
Density (Houses/ha.)	19	24	26	33	38	40

Source: Ardhi Institute (1988); Community Infrastructure Programme (1994), UCLAS (1998).

The settlement is only 4 kilometres from the city centre within a relatively easy accessibility to services and social facilities. That location has made its land and properties attractive to developers and tenants. Hanna Nassif settlement is relatively more spatially consolidated compared to many other unplanned settlements in the city.

2.6 Access to Land

The Hanna Nassif settlement was established in the 1960s. It is thus one of the oldest informal settlements in Dar es Salaam city. Land use in the settlement is not regulated by the existing formal planning/land management mechanisms. Like in other unplanned settlements in the city, informal land subdivisions and transactions, mainly buying from the original owner, form the main means through which land is supplied for building and other uses. From the building/property registration exercise, it was revealed that over 50 % of the present land-owners obtained their land through buying. Likewise the socio-economic study indicates that 52.2% of the present land-owners obtained their land through buying. This finding does not differ significantly from findings from the 1994 baseline study which established that 56.6 % of the households interviewed obtained land through buying.

The 1998 socio-economic study has further revealed that land acquisition via outright house purchase constitutes 37.7% of the owners while only 6.5% of the owners inherited from their families and 2.6% got land from their relatives or friends.

Regarding the period in which land and properties were acquired, the socio-economic survey (1998) revealed that over 50% of the land-owners in Hanna Nassif had acquired the land as early as 1980s and about 12% acquired the same between 1993 and 1998. Older inhabitants who constitute about 30% had acquired land in the 1970s. Majority of the houses (over 70%) were built or acquired by their owners during the 1980s.

Due to the increase in density within the settlement, there are small spaces left between buildings. Trends show that, even those small spaces are likely to be built on, given the ongoing uncontrolled development. For instance, the originally vacant CCM playgrounds which were vacant in 1994; are now fully developed with commercial properties. Other commercial activities are carried out along the existing roads and paths; and in some spaces linked directly to individual properties or group of houses; in few existing small gardens, drying and washing areas; and other domestic outdoor/activity areas or even in scattered vending stalls. Out of the 1897 existing properties/buildings in Hanna Nassif, 68 included structures under construction and 52 form non-residential buildings as pure commercial, institutional and industrial properties. Therefore the actual number of housing units for the analysis is 1777.

Only 2.7% of the property owners had surveyed and registered their plots to obtain certificate of occupancy. The 1994 baseline data indicates that 16% had surveyed their plots. This difference may be explained by the mismatch between the area covered by the 1994 study, e.g. part of adjacent planned area where most plots are registered. It could also be possible that property registration and surveying mean different things to the respondents in the two studies. For this study, property registration means surveying, demarcation of plot boundaries by beacons or pins, registration and issuing of certificate of a right of occupancy by the Commission for Lands.

The flood prone area of the settlement (other than Msimbazi flood plain) covered a total of. about 20.9 hectares by 1994. However, after the completion of Phase I of the Upgrading Project, flooding in this zone has been controlled. Part of the main settlement area (the elevated section) i.e. the part which was not included in the First Phase Project, has also experienced flooding due to lack of storm water drains. This area is however earmarked for

storm water drainage provision under the Second Phase of the upgrading project (See Map 2.2).

2.7 Housing and Building Characteristics

This section discusses housing development in Hanna Nassif, building conditions, occupancy rates and building tenure. These parameters are then related to findings from the 1994 baseline data or where possible, to similar areas in the city.

The 1998 survey indicates that Hanna Nassif settlement accommodates a total of 1897 residential properties. This figure excludes houses built in the flood plain areas of the Msimbazi valley, but includes 68 structures which were under construction in the main settlement area (the elevated part).

The 1994 study indicates that there were 2113 houses in the settlement. The basis for this figure is a count made on the area (the 1992 aerial photos). This difference could be explained by the situation that the baseline study (1998) categorized housing/properties as verified according to ownership, for example, the 'compound' with more than one building of the same owner; rather than as individual/isolated structures or separate building units which might be the approach for the 1994 study. It would appear therefore that, comparison between the two figures a bit difficult and perhaps, meaningless. However, the actual construction on the ground has increased (in numbers) e.g. 257 units between 1988 and 1998.

2.7.1 Building Materials

About 90% of the existing houses in the settlement are built with sand-cement blocks and roofed with corrugated iron sheets. In this study, these buildings are regarded as permanent. The rest of the houses are categorised as temporary because they are built with mud and pole, earth foundation and thatched roof. Few temporary buildings are roofed with corrugated iron sheets. The 1994 study indicates that only 73.4 % of the houses were permanent. This compares well with the general characteristics of housing conditions in informal settlements in Dar es which as indicated by Marja Hoek-Smit (1990), 68% were found to be permanent.

Temporary buildings were very few in 1998 indicating an improvement in housing conditions in Hanna Nassif. However, in the absence of data on the trends in other settlements it is difficult to associate this trend, solely, with the Upgrading Project.

2.7.2 Density

The total number of habitable rooms in the settlement in 1998 was found to be 9271, accommodating a total of 5,045 households. This makes the average number of habitable rooms per household to be 1.8 while the average number of households per house is 2.8 implying house occupancy to be 11.2 persons, which is higher than the nine persons per house indicated by the 1994 baseline study. The settlement has therefore a relatively moderate degree of overcrowding considering the type and quality of accommodation that it offers, and the two figures indicate that there is a continuing densification between 1994 and 1998.

CHAPTER THREE

3.0 SOCIAL AND ECONOMIC CHARACTERISTICS

3.1 Population Size and Structure

3.1.1 Total Population

Population in Hanna Nassif settlement is estimated at 20,000 inhabitants basing on the estimates of the Kinondoni Ward Office in March 1998. This population is distributed among 5,045 households.

The total population figure represents only a modest increase from the 1994 figure of about 19,000 people. The household size of four has not changed from that established in 1994 and compares well to those of other informal settlements in the city, such as Manzese and Buguruni.

3.1.2 Population Structure

The population structure indicates a dominance of adults and the working groups which constitute 50% of the total population followed by the school age going children (34%), and the remaining 5 years and under age and very few old adults constituting 16% of the total population.

On the family status of the heads of households, there is a dominance of male gender (66%) while female headed households constitute 16%. No comparable figures are available to establish whether there have been changes in population structure between 1994 and 1998.

3.1.3 Level of Education

The majority (62%) of Hanna Nassif residents had acquired basic primary education, 21% had acquired secondary education and 11% had attended colleges or University level training. Again, on the absence of similar information the present data cannot used to establish whether or not there has been change.

3.1.4 Migration to and From the Settlement

When household migration were records were sought, the following were established; 63 % of the households moved into the settlement between 1994 and 1998, 32 % moved in between 1975 and 1993 while only 5 % indicated to have moved in the settlement before 1975. It was further revealed that over 60 % of the households from the sample survey originated from within Kinondoni District.

On the reasons for moving into the settlement, nearness to different places and availability of rooms were cited as key reasons by the respondents - almost in equal proportions. Again, on the question when one moved into the present house, 77.5 % of the households did so between 1994 and 1998. Although there are no statistics on the same issue to facilitate comparison with other informal settlements, these trends suggests that Hanna Nassif is one among the attractive areas for rental accommodation.

3.2 Household Economic Indicators

In this section, we analyse the general levels of household incomes, sources of incomes, expenditure, employment patterns and structure; and the distribution of work places for the Hanna Nassif settlement.

3.2.1 Employment Structure

The household survey indicates that about 39% of the households had at least one income earning member who is employed in the wage earning category (i.e. are directly employed as salaried workers in the formal public or private sectors) and of permanent nature. About 60% had a member who was self-employed in activities like petty trading, gardening, small business, etc.

Table 3.1: Employment by Sector, Hanna Nassif, 1998

Paid Wage Earners			Self- employed		
Category	**No.**	**%**	**Activity Category**	**No.**	**%**
Skilled labour	51	14.5	Livestock	-	
Unskilled labour	84	23.9	Petty trading	138	39.2
Casual labour	4	1.1	Gardening	2	0.6
Professional	10	2.8	Street food vendor	58	16.5
Others	-		Fishing	2	0.6
			Others	3	0.8
Total	**149**	**42.3**		**203**	**57.7**

Source: Socio-economic Survey, 1998.

While each household at least had one working member, about 50% of the total households had more than one income earning member. Among the wage-earning category, the majority (24 %) are constituted by members in the unskilled labour category while 14.5 % are the skilled labour and about 3 % are employed in their professional capacity.

The predominant category in the self-employed group is constituted by petty traders, who forms 39.2 % of the total employees. Street food vendors constitute about 16 % of the total petty traders. When combined figures for these categories are examined (i.e. 55.2%), the proportion has remained somewhat constant when compared to the 1994 figure of 59% for this category of employment in Hanna Nassif.

3.2.2 Income Levels

Accurate data on income sources and levels for many households in the settlement are difficult to obtain due to various reasons; ranging from national socio-economic conditions which affect household budget e. g. inflation, many households' reliance on both formal and informal sources; and the various survival strategies employed by different categories of household members.

According to the socio-economic survey, average household income varied between the country's minimum wage of Tshs. 30,000 which was reported as monthly income by 18% of the total households. 62% of the households earned between Tshs. 31,000 - 90,000. The latter category embodies households in relatively stable income category as wage earning or with permanent business premises within the settlement

Table 3.2: Income Levels in Hanna Nassif, 1998

Income Group (Tshs.) '000'	No. of households	Percentage
+ 210	7	2.7
191 - 210	2	0.8
171 -190	1	0.3
151 - 170	2	0.8
131 - 150	8	3.1
111 - 130	20	7.8
91 - 110	10	4.0
71 - 90	33	12.9
51 - 70	64	25.0
31 - 50	63	24.6
10 - 30	46	18.0
Total	**256**	**100.0**

Source: Socio-economic Survey, 1998.

Comparing incomes with expenditure only about 8% of the total households spent an equivalent of the minimum wage, while over 65% of the total households had their expenditure ranging between Tshs 31,000 - 90,000. This would represent what was actually earned and spent per month on essential items as food, rent, medical expenses, school fees and transport, etc. The expenditure is also higher compared to declared income.

Table 3.3: Household Expenditure Levels in Hanna Nassif, 1998

Expenditure (Tshs. '000)	No. of Households	Percentage
+ 210	6	2.3
191 - 210	5	2.0
171 -190	3	1.1
151 - 170	9	3.3
131 - 150	10	3.8
111 - 130	14	5.3
91 - 110	22	8.4
71 - 90	47	18.0
51 - 70	60	23.0
31 - 50	64	24.4
10 - 30	22	8.4
Total	**262**	**100.0**

Source: Socio-economic Survey, 1998.

The highest proportion of expenditure for the majority of the households was on food. Over 55% of the households spent between Tshs. 10,000 and 30,000 on this item followed by items like house rent, school fees and medical expenses for which over 90% of the households spent between Tshs. 1,000 and 10,000 per month. The average monthly household expenditures for Dar es Salaam were estimated at Tshs. 22,000 in 1990 (Hoek-Smith, 1991) and Tshs. 34,000 in 1994 (CIP).

3.2.3 Distribution of Work Places

About 40% of the employed population have their workplaces distributed within Kinondoni District, and about 30% are engaged or employed in income generating activities Hanna Nassif, while the rest are employed elsewhere in the city. The fact that about a third of the residents are now full-time engaged in activities within Hanna Nassif suggests the existence of a conducive environment to undertake economic activities or that there have been significant opportunities as opposed to 1994 when only 17% of the residents obtained employment within the settlement.

Table 3.4: Location of Work Places in Hanna Nassif

Sn	Location of Activities	No. of Respondents	%
1.	Within Hanna Nassif	115	29.9
2.	City central area	86	22.8
3.	Within Kinondoni District	150	38.7
4.	Ilala District	20	5.2
5.	Temeke District	15	3.9
	Total	**386**	**100.0**

Source: Socio-economic Survey, 1998.

The Evaluation report for the Hanna Nassif Community Based Infrastructure Upgrading (1997) phase I indicate that there has been an uplift of the employment situation in the settlement. It is reported that a total of 24,430 worker days of local employment have been created and that various workers found jobs in construction after phase I of the project ended i.e. the period 1994-97. This includes involvement of people in the maintenance of roads and drains in the settlement, through contractual labour arrangements. From the same source, it is reported that of the total worker days created, 65% comprised man-days and 35% women-days. The present study indicates that 155 enterprises have received credits, distributed among 120 women and 35 men.

3.2.4 Tenure Status of the House Occupiers, and Rent Levels

The 1998 baseline study indicates that 36.7% of all houses in Hanna Nassif were owner occupied, 45.2% owners and tenants; and the remaining 18.1% were exclusively occupied by tenants. The 1994 study shows that 86% of the total houses were owner-occupied; 11% were "free" occupiers and only 2.7% were rented. As stated earlier, this discrepancy could be due to differences in the methodology used rather than real changes and therefore limits meaningful comparison.

About 70% of the total tenant households have rented only one room, 21.8% have two rooms, 3.8% have three and 4.4% have four rooms. However, if the total number of habitable rooms i.e. 9271 is related to total population of the settlement, there are 2 people per habitable room; representing a relatively high degree of occupancy.

Availability of rental rooms was cited by 33.3 % of the tenants as a reason for moving into the present accommodation. Cheaper rents and better accommodation were referred to be the key reasons for choosing the present accommodation by over 40% of the total tenant households.

The rent levels per room per month for the 50% of the tenants ranged from Tshs 4,000 to 5,500. About 36% of the tenant households pay between Tshs. 2,000 and 3,500 as rent/room/month while about 10% of the tenants paid between Tshs.6,000 and 10,000 per room.

There is some congruence on the rent levels obtaining in the settlement compared to the findings of the 1994 study. It was established that monthly room rents in Hanna Nassif do not, on average, exceed Tshs 4,000. While the value of the shilling has depreciated over the 1994-98 period it could still be safely established that the rent levels in this period are comparable at current prices.

The prevalence of tenants in Hanna Nassif and the fact that over 80% of the existing houses are permanent, suggest among other things, apart from the advantages cited by the respondents living in Hanna Nassif; that there is generally a satisfaction among the inhabitants with the living environment and the existing rent levels. The seemingly non-increase in room rents even after settlement upgrading could be attributed to non-improvement of the houses. While the infrastructure provision has substantially improved the settlement environmental condition, observation form Hanna Nassif indicated that housing improvement could not go hand in hand with settlement upgrading.

CHAPTER FOUR

4.0 ENTERPRISES DEVELOPMENT IN HANNA NASSIF

4.1 Introduction

Enterprises in this study refer to the general activities and facilities engaged in the commercial provision of goods/services by an operator, business owner or entrepreneur; it can be a company, firm or an individual doing that business. These are both in the formal and informal sector categories. These are analysed regarding their income generating capacity, employment, constraints and other characteristics.

A registration of enterprises in Hanna Nassif indicates a general increase in numbers and activities for the micro-enterprises, including retail trade, small businesses, service-oriented entrepreneurs and vending (road-side stalls, kiosks, or 'genges'). There were 340 formal and informal enterprises of various categories, scale, and employment levels.

4.2 Trends in Establishment of Enterprises and Types

The 340 enterprises recorded in 1998 represent an increase of about 16 % over the 1994 total of 296 enterprises in Hanna Nassif (Baseline study report 1994).

Regarding the time period during which the enterprises were established, 91.3 % of the operations/activities are indicated to have been developed in the period 1994 - 1998 while only 8.7 % of the enterprises existed before 1994. The 1997 Synergie study established that 40 % of the enterprises operators moved to the settlement more than 10 years ago i.e. well before 1994 and 12.5 % moved there less than 2 years ago (i.e. 1997 and after). But the same report also acknowledges that "in upgraded Hanna Nassif, most businesses' location changes within the settlement occurred in 1994 or later".

The comparability of these results yields some in-congruency due basically to methodology employed. The Synergie study was based on a sample of 50 informal enterprises.

Overall, there is an increase of enterprises as observed, over the 1994-98 period in Hanna Nassif, but perhaps we cannot at this juncture sufficiently establish that those increases are due to the upgrading of the settlement i.e. whether upgrading of the settlement has facilitated / attracted more (informal sector) enterprises (with more profit and employment etc.). The economic reforms which have taken place in Tanzania, trade liberalisation, retrenchment of civil servants in the public sector, etc., all had profound effects on the development of the enterprises, e.g. individuals taking advantage of favourable business environment or retrenchees from the public sector who try their luck by investing part of their terminal benefits in some kind of business and Dar es Salaam being the country's largest market, etc.

As also concluded from the Synergie study on the enterprises, while infrastructure upgrading improves their physical environment and also their business environment; the working environment is not generally limited to physical conditions, it also includes the economic conditions conducive to their business. Continued growth of Dar es Salaam in recent years has led to a congestion of the population in existing residential areas rather than in new areas.

Consequently, more informal sector activities/enterprises development have accompanied this growth for the majority of urban settlements (ILO 1996).

4.3 Location of Enterprise Activities in Hanna Nassif

The enterprise study indicates also that in general, some kind of business exists in any corner of housing clusters within the settlement. Spaces used range from formal buildings (on plots), streets, paths, open spaces or verandahs in front of the houses.

Location of business premises for a majority of the enterprises follow areas with good accessibility and near other businesses. The results of the enterprise registration exercise reveal that entrepreneurs with fixed premises have their premises situated along the major entrance road to the settlement, close to the area adjoining Kawawa Road; to include the CCM blocks and the adjacent predominantly commercial/trading enterprises, which extend up to the Kawawa Road. This zone accommodates over 20% of the total enterprises in the settlement and being closer to Kawawa Road, it has the highest accessibility and thus provide favourable business environment.

The main access road linking blocks 'B,' around to blocks 'F' and 'G' (See Map 1.1), accommodates both commercial/residential properties and vending activities, constituting about 12% of the total enterprises. At the same time the area around the market in block 'C' including the inner access roads and paths; accommodates over 25% of enterprises, including the market, adjacent shops, vending kiosks, stalls; and food stuffs.

Incidentally, the upgraded Road No. 1, part of Road No.2, block 'D,' parts of blocks 'E' and 'C' show a relatively higher distribution of enterprises (i.e. 19% and 15% of total enterprises respectively for blocks 'D' and 'E').

When upgraded Road No. 1 and part of Road No.2 are examined individually, it is found that they accommodate 7.6% and 3.5% respectively of the total enterprises in the settlement. Again, hard evidence to link the distribution of enterprises spatially, considering the upgraded or un-upgraded parts of the settlement becomes difficult to establish. More indicators for instance, level of employment, scale of operations, linkages to other activities, etc., are needed to ascertain these aspects.

A similar conclusion is made by the Synergie study that there are no particular differences between the upgraded and the un-upgraded parts of the settlement - or even when compared to other un-upgraded areas e.g. Kijitonyama and Buguruni (Synergie 1997). Yet, in general there has been an increase and spread of commercial and other activities within the settlement.

This study also found that approximately 45% of the business enterprises are located within the residential buildings i.e. those categorised as commercial residential properties. The figure compares well with that of the Synergie study which established that 40 % of the enterprises are located in permanent structures in the un-upgraded parts of the settlement.

Table 4.1 Location of enterprises in Hanna Nassif, 1998

s/n	Location of the business	Total	%
	Block ‘A’	76	22.8

	Block ‘B’	26	7.8
	Block ‘C’	84	25.2
	Block ‘D’	63	19.0
	Block ‘E’	50	15.0
	Block ‘F’	17	5.1
	Block ‘G’	17	5.1
	TOTAL	**333**	**100.0**

Source; Enterprise survey in Hanna Nassif, UCLAS, 1998.

Table 4.2 Location of enterprises by zone / Area

S/N	Enterprise Location by functional zone	Total	% Total
1.	Enterprises located in, and adjoining the major entrance road, in close vicinity to Kawawa Road and adjacent commercial blocks, (CCM, etc.)	72	21.2
2.	Road linking block 'B' round to blocks ‘F’ – ‘G’	43	12.6
3.	Area around market inner access and paths	33	9.7
4.	The zone fringing the upgraded Road No. 1	26	7.6
5.	The zone adjoining the upgraded Part of Road No.2	12	3.5
6.	Enterprises located within the building: commercial/residential uses	154	45.4
	Total	**340**	**100.00**

Source: Enterprise survey, 1998

4.4 Services Offered and Types of Enterprises

There are 340 listed enterprises, distributed all over the settlement. These have been grouped into five major types: Retail trade/commerce, service-oriented enterprises and other activities; crafts and/or manufacturing, vending, and construction related firms; storage, warehousing, etc. (See Table 4.3). Enterprises have been grouped according to the type of services offered, type of predominant activities, a particular trade, etc.

(i) Retail

There is a large predominance of trading, small retail shops and other related commercial micro-enterprise establishments such as restaurants, bars/groceries, butcheries, etc. This groups constitutes 65.7% of the total recorded enterprises in the settlement. It has also increased in numbers and proportion of total activities compared to the 1994 situation whereby such activities constituted 55.6% for the same category of enterprises.

The Synergie Study (1997) established that 52% of the total enterprises were in the trading and related activities in Hanna Nassif; compared with 45% and 20 of the same in Kijitonyama and Buguruni settlements respectively.

(ii) Services provision

Service oriented enterprises are those which offer direct services to clients e.g. hair dressing saloons, retail pharmacies, tailoring, guest houses, etc. They constitute about 13% of the total enterprises in the settlement. Synergie study reported 10% of such enterprises in the Hanna Nassif settlement.

(iii) Crafts

The crafts and manufacturing category includes electrical and refrigeration repair workshops, carpentry workshops, handicrafts, metal and wood works and production of items like cooking utensils, buckets; welding, etc. They constituted only 3.2 % of the total enterprises in the settlement.

(iv) Vending

Vending activities provide much of the needed services and items as food stuffs items, cooked food (usually conducted by women), vending kiosks and stalls along the roads and in open areas; direct hawking of business items, milk, cooking oil, etc. They together represent 27.3% of the total enterprises in the settlement; up from 18.9% recorded in 1994.

(v) Construction

Construction-related enterprises could not be established in this study. However, activities related to warehousing/storage represents 1% of the total recorded enterprises within the settlement. The Synergie study identified informal contractors who constituted 12% of the total entrepreneurs in 1997.

Table 4.3 Distribution of Enterprises by Type and activities in Hanna Nassif, 1998.

	Enterprises by Type	Total No.	%
1	**Retail trade/enterprises by commercial enterprise**		
	(i) shops	180	52.9
	(ii) restaurant	7	2.1
	(iii) bar/grocery	22	6.5
	(iv) butcher	7	2.1
	(v) local bar (pombe shop)	7	2.1
2.	**Services and other activities**		
	i) shoe shiner kiosk	8	2.3
	(ii) pharmacy	5	1.5
	(iii) guest houses	6	1.8
	(iv) saloon	10	2.9
	(v) milling machines	3	0.9
	(vi) tailoring mart	10	2.9
	(vii) studio (photo + music)	2	0.6
3	**Craft/manufacturing**		
	(i) carpentry workshop	8	2.3
	(ii) handicraft (majiko, sufuria, ndoo)	1	0.3
	(iii) refrigeration workshop	1	0.3
	(iv) welding	1	0.3
4	**Vending**		
	(i) food vending	15	4.4
	(ii) vending kiosk (genge)	34	10.0
	(iii) road side stall (kiosk)	9	2.6
	(iv) milk diary	1	0.3
5.	**construction**		
	(i) godown/warehousing storage	3	0.9
	Total	**340**	**100**

Source; Enterprise survey, UCLAS, 1998.

Table 4.4: Enterprises in Hanna Nassif 1994

s/n	Enterprises by type	small	large	total	%
	commercial oriented/trading enterprises				
1.	Retail	66	37	103	34.8
2.	Groceries	-	16	16	5.4
3.	Restaurants	-	12	12	4.0
4.	Local bars and Pombe shops	9	-	9	3.0
5.	Butcheries	7	18	25	8.4
6.	Vending kiosks (Genge)	42	-	42	14.2
7.	Open food selling (‘Mama Ntilie’)	14	-	14	4.3
	Small scale/service industries				
1.	Garages	1		1	0.3
2.	Carpentry Units	19	6	25	8.7
3.	Kerosene Sub-stations	5	-	5	1.6
4.	Shoe repair kiosks	1	-	1	0.3
5.	Tailoring marts	33	-	33	11.1
6.	Milling machines	2	8	10	3.3
	Total			**296**	**100**

Source: Community Infrastructure Programme, 1994.

Comparing the 1994 and 1998 tables, it appears that there are significant changes in terms of quantity and type of enterprises. However it seems also that some facilities e.g. tailoring, shops, milling machines have been closed down.

The possible explanation for the decline of milling machines might be attributed to the increase in packed maize flours in the shops. Availability of second hand clothes (mitumba) could be the factor affecting tailoring enterprises. There is however a close correspondence in numbers of vending activities identified in 1994 study which recorded 56 of them at that time.

4.5 Employment Characteristics

Direct employment records for all the types of enterprises in the settlement were difficult to establish due to their nature of operations and scale, formal or informal status. For majority of the enterprises in Hanna Nassif, the scale of business was rather small, and that some operators are self-employed. Over 50% of the enterprises in the settlement indicated to have one paid worker, about 30% employed up to 2 persons and only 4.1% employed over 5 persons who are paid to work in their enterprises. The rest of entrepreneurs (15.9%) indicated that they do not employ any paid worker.

The Synergie study established that up to 93% of the entrepreneurs were self-employed and did not employ any paid worker. It was additionally recorded that only 6 % of the operators in the settlement had paid workers.

With regard to gender balance there were almost equal proportions of male and female employees i.e. 51 % and 49 % respectively of those directly employed in the enterprises. Comparison between the Synergie study findings and the present study is limited by the fact that the former report focused on the gender of the business proprietors only.

Self-employed, informal sector operators generally operate to meet subsistence needs. It is likely that even for the majority of the employees in the formal sector will be partly doing business because no single source of income in general, in Tanzania is sufficient to sustain a living by an individual or household.

4.6 Other Enterprise Development Related Aspects : The Project as an Employment Creation Venture

The Hanna Nassif Community Based Infrastructure Upgrading Project aims at income generation. Road and storm water drainage were constructed using employment intensive strategies and various workers found jobs in the construction works and eventually maintenance of the infrastructure provided. Sources from the project indicate that 24,430 worker days of local employment were created by the end of the Phase I Project; and that by December, 1998, additional 1,345 worker days have been created under Phase II. Scope for more employment opportunities exist as the latter Phase of the Project progresses. It has been reported that some skilled and semi-skilled workers got employed at Buguruni and in various construction works after Hanna Nassif project phase I.

4.7 Sources of Capital and Credit Scheme

Establishment of the micro-enterprise credit facility in Hanna Nassif has created a source of capital for micro-enterprises and therefore facilitates the development of local enterprises. Prior to this, sources of capital for establishment of enterprises in the settlement varied, in that only 6.6% of the entrepreneurs obtained loans for the establishment of their enterprises, 19%

of the entrepreneurs used private savings while 17% got grants from relatives. The remaining 54.7% did not disclose their sources of capital used.

Table 4:5 Sources of Capital for Enterprises in Hanna Nassif

sources of capital	total	%
(i) private savings	63	18.9
(ii) loan from friends	14	4.2
(iii) loan from credits	8	2.4
(iv) grant from relatives	57	17.1
(v) not stated	191	57.4
Total	**333**	**100.0**

Source: Enterprise Survey, UCLAS, 1998.

The Credit Scheme

The project has in the second phase established a credit scheme to micro-enterprises. Loans are issued to individuals in groups of minimum five people who in addition to loans, receive some training for 7 days on how to manage business. By July 1998, a total of Tshs 21 million.. of credit has already been distributed to 263 individuals organized in 20 groups for a total of 7 units-under loan arrangements. The credit facility is managed by the Presidential Trust Fund (PTF) and it has so far benefited 191 women, equivalent to 72.6% of the beneficiaries, the rest are men.

Credit utilization has benefited major activities as in the following groups Cooking/cookies (26 %) of total, Vendors/hawking-20 %, Kiosks 13 %, Shop owners, batik, tailors 15 %, Market, grains & other products 16 %, Crafts, timber, carpentry 10 %.

Loan arrangements include re-payment with a 24% interest on the sum borrowed, after 26 weeks. The facility is reportedly doing well and has generated Tshs 2.2 million interest while the fund is now in the revolving phase. It has motivated more entrepreneurs to borrow, thus boosting their working capital and raising local incomes.

A detailed impact assessment of the credit schemes would seem necessary to assess among other things, its effectiveness, accessibility and whether the schemes meets its objectives. However, this assessment is beyond the scope of this study.

CHAPTER FIVE

5.0 INSTITUTIONAL LINKAGES, PARTICIPATION AND CAPACITY TO MANAGE COMMUNITY-BASED INFRASTRUCTURE UPGRADING AND MAINTENANCE IN HANNA NASSIF

This chapter discusses issues related to institutional linkages, community participation and the capacity to manage infrastructure upgrading and maintenance; and the general mobilization of residents.

5.1 The Role of the CDA

Following the registration of the CDA, one of the new conditions for one to qualify for membership to the CDA is to register and pay some Tshs. 1,000 as registration fee. By May, 1998, there were 748 residents registered as CDA members and a total of Tshs. 748,000 was collected as registration fee. However, it is important to underline that despite the achievement of the CDC in the implementation of the first phase of the project and the start of the second phase, the CDA has been facing opposition from a group of residents within the settlement. Although efforts were made to reconcile the two groups since the first phase of the project, it has been difficult to reach an agreement. In a conflict resolution meeting that was convened on 18th August, 1998 by the Kinondoni District Commissioner, it was resolved that the CDA and the opposing group should sit together and amend the CDA constitution to take into consideration interests of both sides. It was further resolved that within three weeks, the two sides should produce an amended draft constitution so as to facilitate election of members of CDA, an exercise which has been delayed for more than one month now.

It is also important to note that although the present CDA members sometimes claim to have been elected by residents, there are complaints among community members on the unawareness of the CDC and later CDA. The 1998 socio-economic studies revealed that many residents i.e. 74.4% of the sample households did not mention the CDA as a CBO and 16% conceded that there were CBOs but did not mention the CDA. The remaining 9.6% knew nothing about CBOs. For those who indicated awareness of the existence of CBOs, they mentioned (UPATU), a loan based local organisation and a Traditional Dancing Group. When pursued further on their involvement in CBO activities, only 8 households or 19.1% indicated that they were involved in loan based group and or 9.5% in traditional dancing groups, and 71.4% were not involved in any of the CBOs.

This observation indicate that either residents do not consider the CDA as a CBO or there is a general unawareness of the CDA as a representative association of the wider Hanna Nassif Community. Although there might be some other reasons attributed to this unawareness one may point out that this situation might also be attributed to the size of the community (i.e. more than 19,000 residents) which do not share the same problem. Attempts to mobilise residents to participate under Hanna Nassif Community upgrading project Phase I proved futile (see Evaluation Report 1997). This is further confirmed by the low attendance to public meetings convened by the TST to popularise the CDA constitution and preparation for elections in the first 6 months of the second phase of the project.

5.2 Community Participation

One of the main objective of Hanna Nassif community - based upgrading project phase I and II has been to involve the community in the whole upgrading process. In this section, we assess community participation using the indicators of participation in election of leaders, decision making processes, contribution to the project, women participation, participation in operation and maintenance of infrastructure, attendance to meetings, modes of information dissemination and access to training and information.

5.2.1 Participation in Election of Leaders

As of June 1998, election of community leaders was yet to be carried out. The present Committee members of the recently established Community Development Association (CDA) are those of the former Community Development Committee (CDC) who seemingly, were rather picked from a group of people that spearheaded the formulation of the project. As such people have not participated fully in the election of their leaders.

The situation in 1994 indicate that before commencement of the project, a follow-up meeting with representatives from ILO, Kinondoni Zonal Director, and 87 Ten Cell community representatives (mainly CCM ten cell leaders) was set-up. This meeting resolved to establish a CDC. It was in this meeting whereby it was further resolved to divide the settlement into six zones and each zone elected a member to represent them in the CDC[1]. The elected members however, only included men and other two elections had to be done to ensure that women were represented. At the end of the election process , out of 19 members of the CDC, 11 were women. Discussion with the CDA (1998) reveals that election of additional CDC women members was done through nomination by the formerly elected men members. Despite its good intention of ensuring gender equity in CDC representation, residents did not participate in the election of women representatives.

5.2.2 Participation in Decision Making Process

The majority of the residents became aware of the project when it was being implemented. This is because they were not involved in the inception and planning stage. Discussion held in August 1998 with two Ten-Cell units members (one from the area where upgrading was conducted and the other one from the area earmarked for upgrading under phase II) confirms that they felt they were not sufficiently involved in the decision as to what should have been contributed by each household and how such funds from other sources would be utilized.

5.2.3 Contributions to the Project

(i) Willingness to Pay

The 1998 socio-economic survey reveals that about 90% or 236 households indicated willingness to pay for the services which would be provided and the remaining were not. Of those who were not willing 46.2% attributed their unwillingness to low income levels, 30.8% to possibility of shifting to other places and 23% to poor management of community contributions. The level of willingness to pay compares fairly well with the 1994 study which indicated that 90% were willing to contribute. The level of willingness to contribute is also

[1]A zone here was taken to represent a group of about 12 Ten-Cell units

comparable to many other unplanned settlements of Dar es salaam showing that if the community is well mobilised, there is a great potential of realizing substantial resources from within the community to effect intended changes or improvements.

(ii) Levels and Modes of Contribution

The socio-economic survey (1998) further indicates that out of 262 interviewed households, only 100 households or 38.2% paid for the services that have been provided in the area. For those who contributed, 81% contributed towards improvement of roads and drainage and the remaining 19% towards construction of the police post. Out of those who did not pay, 56.8% or 92 households claimed that they were not informed about contributions, 8.6% had no money and the remaining 34.6% or 56 households were not in Hanna Nassif area during that period. The level of contribution as was revealed from the socio-economic surveys is shown in table 5.1

Table 5.1. Level of Contribution by Category of Service

Service/Facility	**Contribution**				
	<Tshs. 1000	**Tshs. 1000>**	**Manpower**	**Total**	**%**
Drainage	67	36	1	104	32.5
Roads	46	32	1	79	24.7
Road and Drainage	15	15	1	31	9.7
Solid Waste	26	14		40	12.5
Dispensary	7	19		26	8.0
Public water taps	12	20		32	10.0
Police Post	1	0		1	0.3
School	2	1		3	0.9
Market	2	0		2	0.6
Bus stand	0	1		1	0.3
Mosque	1	0		1	0.3
TOTAL	179	138	3	320	100.0

Source**:** Socio-economic Surveys, UCLAS, June, 1998.

From the above table, the majority of the residents are willing to contribute towards drainage (32.5%), roads (24.7%), solid waste collection (12.5 %). This indicates that there are some areas within the settlement which experience seasonal flooding and therefore residents would like to get this problem solved through drainage construction. Similarly, vehicular inaccessibility and uncollected wastes are among the priority issues to be addressed.

5.2.4 Women Participation

Women participation in this project reveals that they have been playing a role in decision making, implementation and operation and maintenance of the laid down infrastructure. Women have participated in un-paid jobs of cleaning the main drain before effecting a proper system of payments to participating members. In the on-going registration exercise for membership to the CDA majority members who have registered so far are women (i.e. more than 500 out of 800 registered members are women). This scenario reveals that in future planning of activities, women participation at all levels of project development should be taken into consideration.

At the beginning of first phase of this project (i.e. 1994), it was considered that women could not fully participate especially in construction works which were in many cases dominated by men. As time went on, women participated fully and at the end of phase I of the project, 35% of the worker days were undertaken by women and the remaining 65% by men.

Women participation was also noted in decision making as revealed by their larger representation in the CDC. At the beginning of the project 11 members out of 20 CDC committee members were women. This representation provided a forum for women participation in decision-making processes.

After the completion of the first phase of the project, a group of women under the supervision of KIMWODA volunteered to clean the drains as part of the maintenance processes. It was later on decided that KIMWODA should be paid for the work being done i.e. the cleaning of drains thorough community contracting system.

5.2.5 Participation in Operation and Maintenance of Infrastructure

Majority of the residents would like to participate through cash contributions. Under operations and maintenance of the laid down infrastructure, 65.2% of the households preferred to contribute in cash while the remaining 34.8% to participate in meetings and contribute ideas.

In the 1998 socio-economic survey, out of the 19 households who opined on the maintenance of the laid down infrastructure, 24.4% suggested that the government should contribute, 36.8% requested for donor support and 36.8% suggested that people should contribute labour. It was further suggested that the type of organizations which can get people mobilized for future infrastructure improvement should be those which have been selected by people (10.2%) and corruption free groups (12.5%). The remaining 77.3% could not give their opinion.

The desire for the community to participate at all levels of the project has been there. What lacked from the first phase of the project was effective mobilization and sensitization of residents to effectively participate. Mobilisation and sensitisation are time consuming exercise and the two aspects were rather underestimated in phase I. More efforts are being made under the second phase of the project where initial indication of peoples' confidence to the CDA is being developed - as indicated by the increasing number of CDA members.

5.2.6 Attendance to Meetings

One of the indicators of community participation is the level of attendance to meetings i.e. for general and committee meetings. In a discussion with the CDA committee members (August 1998), it was revealed that the attendance rate of committee members to scheduled meeting was at many times 50% of the total number. This has been so because some of the committee members have their responsibilities which inhibit them from always attending the meetings, others have to looking for their means of survival and also the fact that the same committee meetings are not paid for.

The attendance rate to general meetings at zone level has been rather low. The rate of attendance to zonal meetings that were convened by the TST, in the mobilization processes which began in May 1997 under phase II of the project, ranged from 50 to 100 participants.

The attendance for all the visited zones was about 1200 which is about 10% of the expected total. The reason behind this low attendance rate was attributed to residents' unawareness at the beginning of phase II. The attendance rate increased towards the election date.

This has been revealed recently when a group meeting was called upon involving members of two-ten cell units. The attendance rate was quite satisfactory and almost each household had sent its representative to these meetings. Residents explained that because of their close linkage in terms of distance and relationships it is easier to inform and remind them of a scheduled meeting than the whole community. They further conceded that the TST approach of convening smaller group meetings was much more effective than if the approach was to call upon a general meeting. Hence general meetings are in many cases not well attended by the community.

5.2.7 Modes of Information Dissemination

The modes of disseminating information under Phase I of the project to the general Hanna Nassif community included the display of certain information at the CDC office notice boards, sending of messages via ten-cell leaders and occasionally by convening public meetings and Ngoma dancing festivals. Information via ten-cell leaders reached the community much easier than public meetings due to poor attendance to such meetings. Even though these approaches were utilized to facilitate people's participation, the system itself was not in-built in the project activities. Given the large geographical extent of the area i.e. 50 hectares accommodating more than 19,000 residents, it was also difficult to effectively get people informed within a short time.
The CDC had thought another way of informing the general public on their activities through loud speakers. Although this was considered the fast way of informing residents on issues related to their project, yet the response of people has not changed.

5.2.8 Access to Training and Information

Access to training under the Hanna Nassif project has been facilitated through community meetings to the general public and special business training skills to people who qualified for the loans provided by the project. Training under Phase I project was effected through on-job training to carpenters, masons and unskilled people. Seminars and workshops involving both the CDC and other residents were carried out. A study visit to Kenya, Uganda and other areas within the country for some CDC members was also conducted. Two CDC staff were also trained on basic skills on financing and store keeping. Apart from those who happened to get employed in the construction stages of the drains and roads (i.e. on-job training), there has been within the CDA, training in accountancy and store keeping. Training has gone a long way to create capacity within the community, to represent the community, develop new initiatives, and maintain their infrastructure. However the community is not yet strong enough to stand on its own due to limited number of people who got access to these types of training and the fact that capacity building takes a long time.

5.3 Capacity to Manage Community Infrastructure and Maintenance

In this section the capacity of the CDA and the community to maintain infrastructure is being discussed. It includes the financial capacity, training and capacity of the community to mobilise for collective action.

5.3.1 Financial capacity

At the end of Phase I (August, 1996) the CDC had accumulated a total of Tshs. 358,980.80 from community contributions and Tshs. 4,782,167.70 in the maintenance account, accruing from 10% community contracts. Similarly, the CDA introduced a road toll at the two entrances to the settlement in February 1997. From this financial source, the CDA realised a total sum of Tshs. 6,292,900 for the period between February, 1997 and May, 1998.

From these revenue sources, the CDA has managed to maintain the constructed drains and roads. For instance, the CDA has been contracting the Kinondoni Moscow Women Association (KIMWODA) at Tshs 45,000 per month to clean the main drain as part of the maintenance process.

In July, 1998, the road toll was abolished throughout the city. This denied the CDA one of its potential source of revenue. To some extent this has reduced the financial capacity of the CDA to respond to the maintenance needs of the project. However, the CDA maintains the 10% deductions from the community contracts.

5.3.2 Skills Acquired

Few training activities have been conducted under phase II. A limited number of meetings and workshops have been conducted. Most of the time has been spent on preparation for construction works. On job training is yet to commence but some training in enterpreneurship have been undertaken.

Under phase one of the project, training in skills was undertaken through workshops and seminars, on-job training on labour based construction and maintenance, study visits to neighboring countries and networking with other community based organisation within the city and outside the country. Similarly, some members of the CDC were involved in the working groups of the sustainable Dar es Salaam Project (SDP). Through attendance and participation in working group meetings, they acquired knowledge and shared their experience with others. Some TST members attended several International workshops including the City Summit in Istanbul whereby experience of Hanna Nassif community infrastructure upgrading was presented. As such, the project has become one among several best practices in the world, drawing attention of several multi-national organisation and academic institutions.

5.4 Collective Action and Self-help Organizations

Within Hanna Nassif area, there exists other CBOs which have been operating with specific objectives and target groups. These include:

5.4.1 The Kinondoni Moscow Women Development Association (KIMWODA)

This is a women group comprising 20 members. The group was established in 1994. KIMWODA is a registered association since 1995 and operates within Hanna Nassif with the following main activities:

Collection of solid waste from households on commercial basis so as to maintain cleanliness and enhance the environmental condition of the project area. Subsequently, employment opportunities are being created to participating women.

Cleaning of the storm water so as to facilitate smooth flow of storm water. This task is being undertaken on contractual basis. KIMWODA has been realising about T.shs. 45,000 per month from this activity and Tshs. 20,000 per week from solid waste collection. At least 6 women have been employed in these activities.

5.4.2 Hanna Nassif Youth Farmers and Development Association (HAYOFADA)

This is a recently established youth group comprising 20 members residents of Hanna Nassif. The group has acquired about 500 acres of land in Morogoro where they intend to shift to establish large scale gardening and farming activities.

5.4.3 Mkwajuni Women Development Association (MKUWODA)

This is an association which was established even before commencement of the project phase I. It is actually the oldest registered women group within Hanna Nassif. It has been operating in Hanna Nassif and outside the settlement primarily focusing on income generating activities for its group members, and particularly now, involvement in waste collection.

5.4.4 Traditional Dancing Group

Although the status of this group is yet to be established, it was revealed during the socio-economic surveys that some members of the community are involved in this group. As a cultural dancing group, it forms an entry point for future community mobilisation and animation thereby contributing to peoples' awareness to the project.

The above mentioned groups not only indicate the inherent potentials of the community to mobilise but also provide an opportunity for change agents to utilise them as vehicles for the on-going activities and future operation and maintenance of the planned infrastructure.

5.5 Mobilization of Residents, Empowerment and Conflict Resolution

5.5.1 Mobilization of Residents

As an entry point to the second phase of this project, UCLAS strengthened the animation and community mobilisation team by engaging a consultant, animator and field animators to enable the community better organise itself and be aware of their capacities to tackle the existing problems. The following tasks have been undertaken by the Animation Team:

- Registration of the Hanna Nassif Community Development Association (CDA) constitution
- Conceptual framework for animation has been developed and communicated among TST members
- Popularisation of the constitution. This was conducted through Popularisation meetings.
- Popularisation of the election 'Manifesto as a preparation for election.

5.5.2 Empowerment

Following the suspension of election that was scheduled for December 1997, the TST developed a strategy of working with branch leaders because it was observed to be easier for them to reach the community. This has helped to boost self-confidence and increased project ownership and coordination at local level. Similarly, the TST decided to work directly with community members especially during the construction of the 335m long drain. Similar approach is being adopted to install water points through the ten-cell leaders and house owners.

5.6 Conflict Resolution/Management

The project is yet to institute an in-built conflict resolution mechanisms to address the issue of differing interests within the community groups and to bring them to a common understanding. While the on-going conflict between the CDA and the opposing group has persisted for more than three years, the past resolution attempts by the Member of Parliament and the District Commissioner proved futile. The TST has been trying to participate in conflict resolution and considers that the on-going arbitration between the CDA and the opposition groups is one of the agreed strategies to avert further conflicts and probably to curb destructive power mongering future. Indeed all parties within the community may have to sit together eventually, to forge a common understanding of the project, not least being the need to understand the benefits the improvements bring to the residents and their environment in the settlement.

Judging by the events at the height of the crisis that resulted into closure of the CDA office (Aug.-October 1998) and partial paralysis of the project activities, there is a need to educate the community to enable them better understand their environment and project activities. The role of animation and other community mobilization procedures therefore becomes of paramount importance.

CHAPTER SIX

6.0 CONCLUSIONS

Introduction

This baseline study provide insights in the changes that have occurred in Hanna Nassif settlement over the past four years during which time the Community-based upgrading project was implemented. Attempts are made in this chapter, to relate the observed changes to the improvements made under the project. There are clearly observable changes relating to the improvement of accessibility, reduction of the flooding problem for most part of the settlement, intensification of land/building uses primarily as a result of the conducive environment now obtaining within the settlement.

6.1 Improved Infrastructure Condition

The upgrading of Hanna Nassif settlement under phase I resulted into improved accessibility especially the central parts of the settlement where road conditions were very poor. The provision of drainage channels has also solved the flooding which affected the entire central areas of the settlement. The construction of the main drain and the side drains has improved the drainage condition of more than a half of the low-lying central area. Before upgrading house owners were spending up to T.shs. 8,000 per annum for minor repairs of their properties which were being damaged by floods. The 1998 survey reveals that no house got damaged or was seriously affected by flood despite the heavy rainfall that was experienced this year. The kind of flood that was experienced in this year's rainy season was a temporary one and the stagnant water pools was early drained off into the main and side drains. The fact that poor drainage and/or flooding problem does not feature prominently as a priority issue from the opinion of the respondents - despite being the key aspect of the upgrading project intervention, suggests that generally there is more satisfaction among the inhabitants on the issue as compared to the situation before 1994.

6.2 Improved Health and Environmental Condition

As a result of the upgrading project, the health and environmental conditions have shown substantial improvement. Trends suggest that waterborne and water related diseases are on the decrease in terms of number of cases that were reported and attended by some dispensaries within Hanna Nassif. For instance the number of diarrhea cases in one of the dispensary in 1994 was 170 while the same dispensary recorded 94 and 101 cases in 1997 and 1998 respectively.

The state of sanitation has not changed particularly on the type of sanitary facilities used. majority households still use pit latrines a situation which depicts the same condition as it was in 1994.

There is a notable improvement in terms of solid waste management at household level whereby the proportion of households disposing solid waste haphazardly has been reduced. This has been attributed to some extent by the introduction of charged waste collection services at household level by a group of women within Hanna Nassif. However, the absence of a dump site has been a stumbling block for effective waste management at settlement level.

6.3 Rent Levels

Majority of the houses in Hanna Nassif are owner/tenant occupied accounting for 45.2%. Only 18.1% are exclusively tenant occupied. Despite infrastructure and environmental improvement, rent levels per room seem not to have changed between 1994 and 1998. This is presumably because many of the houses were not improved concurrent with the infrastructure works in the settlement.

The main motivation for moving into Hanna Nassif settlement is, according to majority of the respondents, availability of rental rooms, cheaper rents and better accommodation. Despite the high density of the settlement, it seems reasonably safe to establish that the gentrification of the settlement generally favours owners to invest more in additional accommodation (rooms) without altering much the rent levels in the settlement. The prevalence of tenants in Hanna Nassif and the fact that over 80% of the existing houses are permanent, suggest among other things, apart from the advantages cited by the respondents of living in Hanna Nassif; that there is generally a satisfaction among the inhabitants with the living environment and the existing rent levels.

6.4 Employment and Income Generating Opportunities

General levels of household incomes, sources of incomes, expenditure, employment patterns and structure; have not changed radically since 1994. There are however observed potentials and actual uplift of the employment situation in the settlement after the implementation of the Project in Phase I. A sizable proportion of the residents have found jobs in construction of drains and roads; and maintenance work. The employment situation is envisaged to improve further in the Phase II implementation of the project. Moreover, a section of residents have received skills in construction, micro-enterprise/business management and in some actual technical jobs-e.g. in office management.

The fact that about a third of the residents are now full-time engaged in activities within Hanna Nassif suggests the existence of a conducive environment to undertake economic activities or that there has been a direct employment creation as compared to, for instance, the 1994 situation.

There is a general increase in both overall numbers and activities for the micro-enterprises, including retail trade, small businesses, service-oriented entrepreneurs and vending. These developments, together with the introduction of the micro-credit facility can directly be linked to the project (in both Phases).

6.5 Popular Participation

Peoples participation in the project is yet to achieve adequate attention. Community mobilization, sensitization and proper communication between the CDC (now CDA) and the community have not been well attained mainly because mobilisation and sensitization are time consuming tasks and therefore are part of the project itself and unlimited in terms of time. Residents are yet to elect the CDA leaders. This situation has undermined representativeness of the CDA to the whole community. The degree of willingness among community members to pay for the new services was observed to be very high, i.e. 90% of the

sample size. However, the actual contribution to the project phase I was rather low. Socio-economic studies of 1998 reveal that the majority of the residents prefer to contribute money than labour probably because of time constraints i.e. being engaged in other activities to earn a living.

The number of participating women in the CDC committees and membership registration for CDA is bigger than that of men. Women participated well in drainage construction under phase I of the project. Seemingly, the majority representation of women in the CDC and in the construction stage of the project had enlightened them to be considered further in future programming and implementation of planned activities within the area.

Participation in terms of attendance to meeting was observed to be relatively low. A 50% of committee and 10% of general meetings attendance was realized. This has been attributed to the fact that committee meetings are not paid for. However, attendance rate at ten-cell unit level was observed to be satisfactory.

Substantial training efforts have been made under phase I of the project. Training through public meetings at zone level special business training to group members who qualified for the micro-loans have been conducted.

6.6 Institutional Coordination

There are good institutional linkages among institutions implementing Hanna Nassif project phase II. This has been facilitated by the steering committee meetings and other coordination arrangements in-built within individual agencies. Apparently, there has been a weak linkage between the CDA and the overall community. This situation has been attributed to the fact that election of CDA members is yet to be effected due to the on-going conflict between the CDA and the opposing group. As such, the present CDA members are basically acting in their positions waiting for the election to be made. The low linkage between the CDA and the community has been revealed by the low levels of community contribution and participation to meetings.

6.7 Community Facilities

The state of social and community facilities has not shown significant improvement after the upgrading project. Both the number and quality of educational, health and religious facilities have remained almost the same with the slight increase in population from 1994 to-date. There has been an increased pressure on primary schools; whereby for example, in Juhudi Primary school, the enrollment of pupils has been six times the supportable population by the existing classes. Similarly residents have complained over the absence of a government health facility within the neighbourhood necessitating people to travel to Mwananyamala Hospital for the same requirement.

A few houses (45%) are connected to electricity only 2.6% have telephone connections. A few houses are connected to water supply (28%). This scenario reveals almost no changes when compared to the 1994 situations. Water supply condition is relatively better than many other unplanned and planned settlements in terms of reliability and quantity. The consumption

and expenditure pattern on water supply does not differ from many other neighbourhoods in Dar es Salaam.

6.8 Land and Building Use

The main use of land in Hanna Nassif has remained residential as has been before and during the 1994 situation. The land and building use structure of the settlement has basically remained the same; except the commercial-residential category which has increased modestly. At the same time densification of the settlement continues, including: building extensions on plot, the densification of the 'compound' categories (clusters under the same ownership), completed new buildings and replacement of the originally temporary residential structures with commercial or other uses. Building construction has intensified in the flood prone zone.

It is generally observed that the settlement is relatively more spatially consolidated compared to many other unplanned settlements in the city.

The mode of land acquisition in the settlement, like in other unplanned settlements in the city, has been and continues to be, through informal land transactions, mainly buying from the original owner. Trends show that, even the few small spaces are likely to be built upon in the near future; which is an evident ongoing process.

6.9 Population Structure

There are modest changes with regard to the population in the settlement. The average household size for the settlement has for example, remained somewhat constant at four, in the period 1994-98. The overall total number of households for the settlement; indicates a moderate change from 4,700 in 1994 to 5,045 in 1998.

6.10 Potentials for Community to Maintain Infrastructure

It has been observed that there exists a great potential within the community to manage and maintain the infrastructure. This has been revealed by the introduction of income generating activities within the settlement e.g. the road toll and sub-contracting of the women group (KIMWODA) to clean the main drain as part of the maintenance programme. Also, the community revealed its potentiality to mobilize for collective action through establishment of various CBO and groups such as the KIMWODA, HAYOFADA, MKUWODA, Traditional Dancing Group, and a good number of groups which were formed to qualify for the loans currently being provided by the Credit Scheme.

Mobilization efforts under Hanna Nassif Project Phase II reveals some positive signs of people's awareness to the project. However, the project is yet to adequately address the issue of conflict resolution as revealed by the persistence of the groups oppositions and deferments of general election.

The following table i.e. table 6.1 provide a summary of observations and development trends for the settlement before and after implementing Hanna Nassif Project Phase I.

Table 6.1: Summary of Development Trends for Hanna Nassif Settlements (1994 - 1998)

S/No	ACTIVITY/ISSUE	SITUATION IN 1994	SITUATION IN 1998	OBSERVED CHANGES	REMARKS
1.0	**INFRASTRUCTURE CONDITION**				
	1.1 Road network condition and accessibility	• All roads were earth surface without drains	• Total length of 1 kilometre road has been improved.	• Improvement of physical state of the roads i.e. surface conditions and side drains. •	• Increased locational accessibility by public transport especially taxis.
		• Road No. 1 and 2 were not passable during rainy season due to flooding and poor surface condition	• Road No. 1 & partly No.2 have been improved to murram surface with side drains. Now passable throughout the year.	• Passability of all roads throughout the year.	• In general, the number of houses accessible by vehicles has remained almost the same as was the case in 1994. But the improvement of the road has made vehicular passability possible for the whole year round
		• 56.4% of the houses had no vehicular accessibility.	• 59.7% of the houses had no vehicular accessibility	Housing vehicular accessibility not increased because no new roads have been introduced.	• Housing accessibility is comparable to many similar unplanned settlements at city level. It is now possible to reach many sections of the settlement by taxi.
	1.2 Drainage system	• There were no drains. Low lying areas were seriously flooded during rainy seasons	• Main drain covering a total of 650 metres in place. • Side drains covering a total of 1000 metres along side improved roads constructed.	• Serious flooding controlled	• Areas that were temporarily affected by floods included some sections earmarked for upgrading under phase II. Even though, the storm water was easily drained off into the nearby drains that were

					constructed under Hanna Nassif Project Phase I.
	1.3 Extent of flooding	• The whole central parts of the settlement covering 20.9 ha were affected by floods during rainy season.	• Flooding problem has been controlled. Only a few portions of the low-lying central part of the settlement experienced stagnation of water for a short period.	• Severe flooding during heavy rain has been checked.	
2.0	**HEALTH AND ENVIRONMENTAL CONDITION** **2.1 Environmental situation.**	• Overflowing wastes from pit latrines and garbage dumped in open pits mixed with storm water polluting the entire housing environment.	• There was no water overflow from pit latrines during the 1998 rainy season and haphazard garbage dumping has been largely contained.	• Improved environmental condition.	
	2.2 Sanitation	92.2% of the houses had pit latrines, 6.6% VIP and 1.2% WC. • Flooding exposed excreta disposal to the surface water polluting the entire area which was flooding during rainy season.	92.7% of the houses had pit latrines and 6.7% had WC. One house was observed to have no sanitary facility. • There is frequent filling up of the pits at the central parts of the settlement.	Virtually there is no change on the type of sanitary facilities used. • The extent of flooding and exposure of excrete disposal from pit latrines has been minimized.	• The continued filling up of pits in the central parts as the settlement is due to the high water table of this area.
	2.3 Cases of water borne diseases	• The total number of cases for water borne	• The total number of cases for water borne and water related	• Reduction in the number or reported cases of water	• The No. Of reported cases for the city of Dar es salaam for the same

		or water related diseases was 4137.	diseases is 2520.	borne and water related diseases by almost 40%.	diseases is on the increase. The upgrading project has improved the situation and consequently reducing the incidences of water borne/water related diseases.
	2.4 Solid waste management	• 39% open pits, 20.5% public spaces 21.3% in containers, 15.5% Msimbazi valley and remaining 3.32% not specified • Paid waste collection was limited to few premises e.g. market, restaurants and shops. • Lack of dump site.	• Open pit dumping accounts for 19%, 73% along Msimbazi valley, 8% other places. • Paid solid waste collection services provided by a group of women. • Lack of solid waste dump site.	• Diminishing trends in open pit dumping to waste disposal along Msimbazi valley. • Expansion of paid waste collection from commercial to residential premises. • No change.	• Seemingly the commercialization of waste collection has reduced the number of household using open pits for waste dumping. • Increase in waste dumping along Msimbazi indicates the need for a waste dump site.
	2.5 Expenditure on housing repairs	• Some house owners were spending up to Tshs. 8000 for minor repairs of damaged houses.	• There was no house that was damaged during the 1998 rainy season.	• Expenditure in housing repairs emanating from flooding, effects has been eliminated.	
3.0	**RENT LEVELS** **3.1 Room rents**	• Established that monthly room rents were on average at T.shs. 4,000 /room	• Over 50% of tenant households paid between T.shs. 4,000-5,500; 36% paid T.shs 2,000-3,500.	• Despite depreciation of the Shilling, rent figures are comparable in the period 1994-98; and within the range of what is observed for other unplanned settlements	• Probably the non-increase in room rents is due to fact that many buildings were not improved concurrent with the settlement upgrading phase I. • From the opinions of the residents,

					there is generally a satisfaction with the living environment and the existing rent levels.
4.0	**EMPLOYMENT AND INCOME GENERATING OPPORTUNITIES** **4.1 Employment structure**	• Self-employed group constituted 59%.	• 61% self-employed, mostly in petty trading • 50% adults, working group • 39% of households in the wage-earning group.	• Employment structure of Hanna Nassif has not changed significantly	
	4.2 Direct employment created by the project	• About 20,000 work days was estimated at the beginning of the project	• Employment created to the rate of 24,430 work days was achieved. 65% constituted man days and the remaining 35% women days.	• This was 4,430 workdays additional to the estimated figure of 20,000.	• The fact that the project has created some employment places between 1994 and ’98 also means an uplift of the income generation situation within Hanna Nassif.
	4.3 Distribution of workplaces:	• Only 17% of the employed households had their work places within Hanna Nassif.	• 40% of the employed households have workplaces within Kinondoni District, 30% have income-generating activities within HANNA NASSIF.	• There is an increase in quantity of home based or income generating activities within the settlement.	
	4.4 Enterprise development	• 296 enterprises were recorded in Hanna Nassif.	• Total 340 enterprises recorded • 91.3% of present operations are established in the period 1994-98.	• Observed changes in quantity for the period 1994-98. Overall increase by 16%. • In upgraded part of the settlement, most business locational changes	• One cannot sufficiently establish whether those changes are due to the Upgrading of the settlement.

				occurred after 1994.	
		• 55.6% of the total enterprises dealt with retail & trading activities. • Vending activities constituted 18.9% of total. • Solid waste collection not organised and instituted	• Large predominance by trading/retail activities (65.7%). • 50% of the enterprises had only one paid employee. • Commercialization of solid waste - an income generating activity. KIMWODA operating within Hanna Nassif.	• Generally there is a change on the pattern and size of enterprises. • Increased scope for more employment creation in Phase II. • Creation of 4 employment places to the women group	• Yet, one cannot sufficiently establish whether those changes are due to the Upgrading of the settlement.
5.0	**POPULAR PARTICIPATION** **5.1 Election of leaders & decision making**	• Many residents did not participate in election of leaders and decision making	• Residents have not participated because election of community leaders is yet to be conducted.	• No change.	
	5.2 Willingness to pay	• Level of willingness to contribute to the project is very high i.e. 90%.	• Level of willingness was high i.e. 90%.	• No change.	
	5.3 Attendance to meetings	• Attendance to meetings - relatively low rate.	• Attendance to meetings - relatively low rate.	• No change	

	5.4 Access to training and information	• Conducted through meetings, seminars, notice boards, workshops and on-job training	• Relatively few meetings and seminars have been conducted.	• Formal and on-job training have taken place.	• Substantial training under phase II of the project are is yet to be effected because emphasis has been put on preparation for election of leaders and construction works in the first 12 monthly of the project.
	5.5 Number of CBOs	• Only one CBO was existing i.e. the CDC.	• Several groups have emerged each with specific objectives and targets e.g. KIMWODA, MKUWODA, HAYOFADA, Ngoma Troupe, Loan Groups and UPATU.	• The general trend suggest that grassroot CBOs are increasing.	
6.0	**INSTITUTIONAL ARRANGEMENT AND LINKAGE** **6.1 Project execution**	• Phase I of the project executed by International Agencies (ILO, UNDP)	• Project executed by national Agencies	• Project executed nationally	
	6.2 Community representation	• The CDC was the representative of the community. It was not registered. It operated under HNCDT. • The CDC had no members	• The CDA has been registered. It represents the general community and particularly registered members. • Members have to register with the CDA. Thus the community largely refers to those members have registered and paid	• No change on representation of CDA members. Still the current members are nominated members; election yet to be conducted. • Change in the structure of, and membership to the CBO.	

			membership fees to the CDA.		
	6.3 Linkage between the CBO and the community	• Weak linkage between the CDC and the community. • Opposition from some group members from within the settlement.	• Weak linkage between the CDA and the community. • Opposition routines from the same group.	• No change • No change	• Efforts are being made to reconcile the opposing groups.
	6.4 Capacity to manage infrastructure	• Inadequate capacity to provide and maintain infrastructure. • Inadequate capacity to mobilize for collective action.	• Financial mechanisms established for infrastructure maintenance. • Increased capacity to mobilize for collective action.	• Financial sources were established to raise fund for project maintenance e.g. road toll. • Several CBOs and NGOs have emerged some of which support efforts being made by the CDA.	
	6.5 DCC Support	• The DCC was supporting the project by provision of technical staff.	• Support the project by provision of technical staff	• No change	
7.0	**COMMUNITY FACILITIES AND UTILITIES** **7.1 Number of facilities**	• The 1994 study recorded 2 primary schools, 2 churches, 6 mosques, 2 nursery schools and 4 dispensaries.	• Recorded 2 Primary schools, 3 churches, 4 mosques and 5 dispensaries.	• There has been some slight variations in number of facilities. The number of churches increased from 2 to 3, dispensaries from 4 to 5, but mosques and nursery schools decreased from 6 to 4 and from 2 to none respectively	• There has been no formally registered nursery schools since 1994. Many of them were being run by individuals in selected housing compounds

		• Congestion in Juhudi primary school - enrollment beyond capacity of the classrooms.	• Congestion in Juhudi Primary school classes.	• No change	• Juhudi Primary school lack space for expansion.
	7.2 Water supply	• 18.8% had house connection, 39.1% plot connection and 41.8% no water connection. • Price of water was 5/= per bucket of 20 litres.	• 20% of the total houses have private water connection 8% plot connection and 72% no water connection. • Prices of water is 10/= per bucket of 20 litres.	• Seemingly the number of plot connections has increased from 8% to 39% between 1994 and 1998. • There has been an increase in price of water per bucket from Tshs. 5 per bucket of 20 litres to Tshs 10.	• The general condition and reliability of water supply is better than many settlements at city level. • Although the price has increased majority of the residents can afford to pay for water. Residents pay between Tshs 1500 to 3400 per month.
	7.3 Telephone Services	• No data	• Only 2.6% of total houses are connected to telephone services.		
8.0	**LAND AND BUILDING USE** **8.1 Land acquisition**	• 56.6% of owners bought land from the original owner	• Buying from owner constituted the main mode (56.6%) of present owners.	• Observed continued subdivision of originally vacant spaces	
	8.2 Land/building use	• Over 70% of houses were of pure residential use • Commercial/residential properties formed 6.7%.	• Houses have remained predominantly of residential use (89%) • A modest increase for commercial/residential uses (10%). •	• No significant changes • Increased commercial undertakings	• The settlement has on the overall densified. There is a strong willingness to move in. • However, there is no direct evidence suggesting a correlation between increase in commercial activities and project activities.

	8.3 Housing and population density	• Registered houses properties were 2113 • Average household size (4). • Occupancy established at 9 persons per house. • Gross residential density was 380 persons per hectare	• Recorded properties was 1897, including 'compound' under the same owner • Same household size as in 1994. • Occupancy observed to be 11.2 persons per house. • Established density is 417 persons per ha.	• Buildings/ properties have actually increased in the settlement e.g. 257 units (1988-1998) No change • Slight increase from 9 to 11.2 persons per house between 1994 and 1998. • A significant increase of population density also confirmed by the household interview result.	• The 1998 study revealed that some properties that appeared as separate buildings belonging to separate owners were in fact belonging to the same owner-in the 'compound' • The settlement's density is on the higher side compared to similar settlements as: Manzese (340), but lower than Keko (550) or Buguruni (450).
	8.4 Housing tenure	• Owner Occupation (86%), 'Free' Occupier(11%), Rented (2.7%)	• Owner Occupation (36.7%), Rented (18.1%), Owner/tenant (45.2%)	• In reality, the 1998 findings support the general housing tenure conditions in unplanned settlements, a predominant owner/tenant or rented accommodation. • 63% of the households joined the settlement in the period 1994-98.	• Settling within the settlement was mainly influenced by availability of rooms (accommodation). 68% of the respondents were influenced by 'easy' rents and proximity to working places.
9.0	**POPULATION STRUCTURE** **9.1 Total population**	• About 19,000 people	• Estimated to be 20,000 people.	• Slight increase from 1994 to 1998 situation.	

	9.2 Population structure	• No data	• 50% of the total population constitute adults and the working groups, 34% school age going children and 16% five years and under age and old adults.		
	9.3 Number of households	• 4,700 households	• 5,045 households	• A slight increase of 345 between 1994 and 1998.	• Dominance of male headed households i.e. 66% versus 16% female headed households in 1998.

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