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MURANG'A MJINI IMPROVEMENT SCHEME

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MURANGA MJINI IMPROVEMENT SCHEME

1.0 INTRODUCTION

The improvement scheme of Mjini, the majengo of Muranga Town was initiated as an extension of a National Housing Corporation Site and Service scheme, planned on the fringes of this traditional squatter area. The guidelines for the improvement scheme as stated by the consultant engineers to the scheme, Viak E.A. Ltd., are as follows:

- i) the existing structures should form the basis for further development,
- ii) the construction of services should entail a minimum demolition.

At a meeting held at the NHC in December 1975, the Housing Research and Development Unit (HRDU) was requested to gather the necessary demographic and technical data, on the basis of the experience gained in the study of a similar improvement scheme of Swahili Village, Masaku Town (Hoek-Smit, 1976). Details about the background of, and the general approach to development plans for Majengo areas can be found in that report.

2.0 BRIEF

After an orientation visit to the site in January 1976 together with Mr. R.W. Thomas of Viak E.A. Ltd., it was decided that the following information should be made available by the HRDU.

- i) the identification of individual housing units (one compound normally consists of more than one structure) and existing informal plotboundaries. (A preliminary cadastral survey of the area has been carried out, but since it did not relate to the

existing structures new definite plotboundaries will have to be established).

- ii) the classification of buildings according to their use (residential, commercial, communal).
- iii) an evaluation of the quality of the individual structures or parts of structures, to indicate how many can be regarded acceptable for retention, either in their present state or after improvement.
- iv) a study of the population characteristics relevant to the future planning of the area.

Information on the income structure, and place and type of employment were not considered relevant by the NHC at this stage.

3.0 SURVEYS

The data were collected in two surveys.

- i) a demographic survey in March 1976, covering the total population of Mjini. Separate information sheets were prepared for each compound. At the same time, housing units were defined, tentative plotboundaries were marked and adjustments made to the preliminary map of the area provided by the NHC. This information was combined in a new map of Mjini prepared by the HRDU (see Fig. 1 and 2).
- ii) a technical survey in April 1976, using the technical check-list developed by the HRDU. This list is designed to provide information in sufficient detail to form the basis for the allocation of differentiated material loans (cf. letter from Viak E.A. Ltd. to NHC of November 1975).

4.0 SITUATION

Mjini is the oldest African settlement in Muranga Town. It is situated on a ridge opposite the town centre and

separated from it by a valley through which the main Nairobi-Nanyuki road runs. On the same side of this road a small commercial centre with a bi-weekly market is situated to the south of Mjini, with a stretch of farmland in between the two areas. To the north lies a NHC ^{Kenya Purchase} Site and Service scheme, completed recently.

Three areas can be distinguished in Mjini, that are clearly distinct in terms of historical development and, consequently, in social and physical characteristics

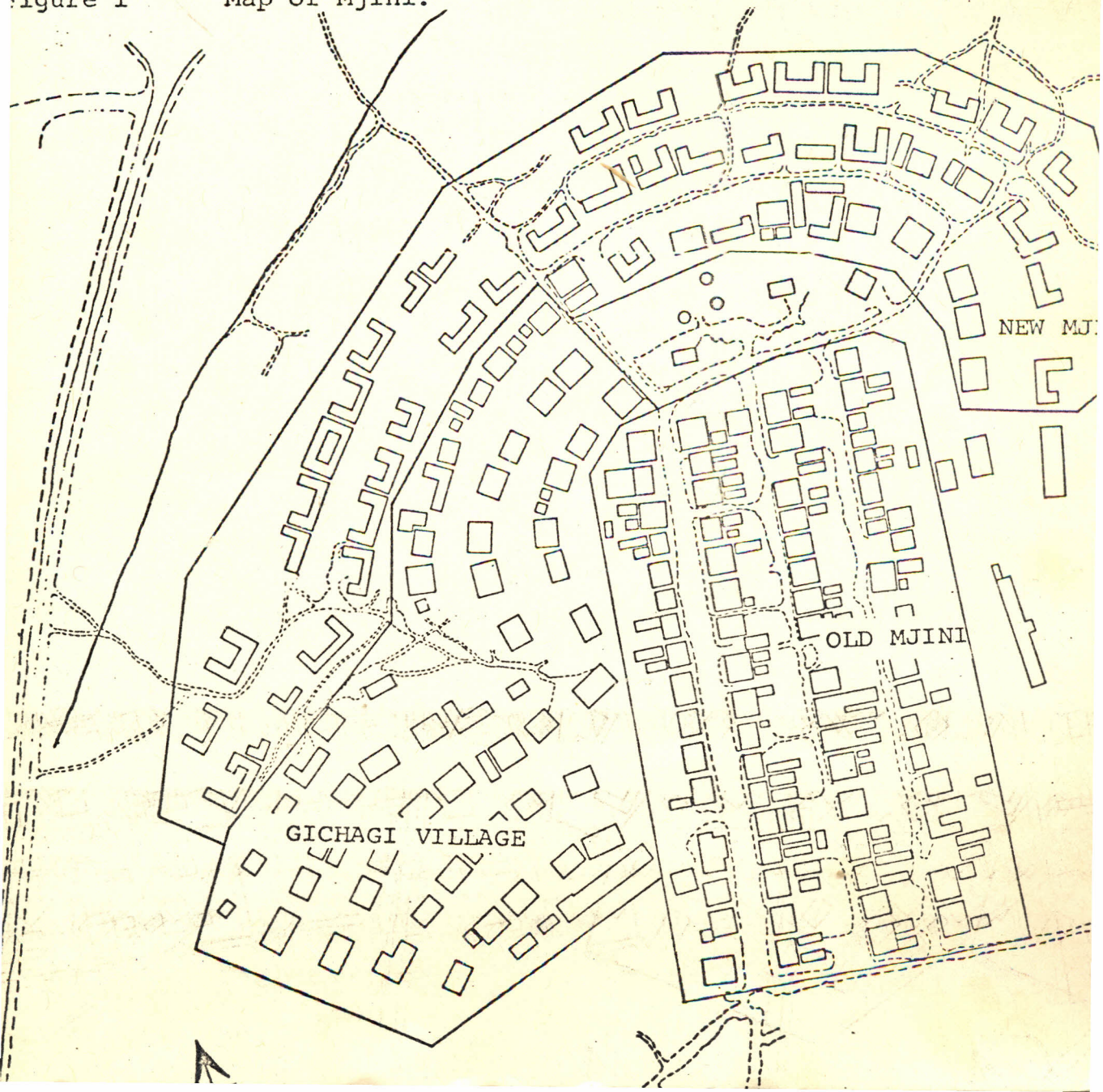
i) the oldest part of Mjini, situated on the ridge consists of 68 housing units (numbers 1 - 68 in Fig. 2), constructed in 4 parallel rows with three roads in between. This area was allocated to the growing Swahili population of Muranga (then Fort Hall) in 1906. This explains why up to now more than 80% of the houseowners adheres to the Islamic Faith. The plot demarcation as it exists today was developed in the forties by the Moslem leaders. This area will be referred to as "Old Mjini".

ii) During and after the Emergency (1952-56) 53 plots (numbers 101-153) on the western and northern slopes were allocated to the Moslem population that had lived in a camp during this period. At the moment still nearly 70% of the houseowners are Moslem. The houses are built in parallel lines following the slope contours, with narrow roads, half way on the slope between the rows of houses. This area is called Gichagi Village.

iii) The third area consists of 51 newly developed plots,

allocated to individuals by the municipality, on the lower parts of the slopes. The majority of the 51 plots have been developed after 1972 (numbers 69-100 and 154-172). This area is different in that it has no predominant Moslem character, although a number of Moslem house-owners or their relatives from the above mentioned areas, acquired plots there (25% of the house-owners are Moslem). This area will be referred to as "New Mjini". The outline of the area is shown in Fig. 1. Plotnumbers can be found in Fig.

Figure 1 Map of Mjini.



5.0 DEMOGRAPHIC DATA

As has been demonstrated before in the study of Swahili Village, Masaku, there is a marked difference in demographic and socio-economic characteristics between the group of houseowners and that of the tenants living in majengo areas. It is therefore useful to distinguish these two groups.

5.1 Total population

The number of inhabitants of Mjini is 2250, divided over 850 households. As the total population of Muranga Town can be estimated to be 7500 (based on a population projection from the 1969 census; see ref 2 and 3) about one third of the population of the town is living in Mjini. Of the total population of Mjini 31% belongs to the group of owners (i.e., the owners of houses and all relatives living with them, that do not pay rent).

Table 1 Population figures for the different areas in Mjini.

	Old Mjini		Gichagi Village		New Mjini		Total	
	n	%	n	%	n	%	n	%
Owners	355	41	208	36	132	17	695	31
Tenants	520	59	371	64	639	83	1530	69
Total	875	100	579	100	771	100	2250	100

The difference between the areas in the ratio owners : tenants is clearly reflected in these figures. This is partly due to differences in room density per plot (see section 5.4) but mainly to differences in degree of absentee landlordship (see section 5.5). In general the owner group is a minority, even in Old Mjini.

5.2 Age and Sex Structure

Of the total population of Mjini one third is under 10 years of age and one half is of working age (15-50 years). As can be expected from the above data on the ratios owners : tenants, these figures vary between the different areas of Mjini, because of the fact that the household composition differs greatly between the owner and tenant group. In general, the owners live with their whole extended family in town, while the tenants mostly are single or bring only their nuclear family to town. Consequently the population in Old Mjini and Gichagi Village is relatively older than in New Mjini, where more adults (in particular males) are found and less people over 50 years.

This difference can also be seen in the ratio males : females. The number of males per 100 females in Mjini is 111 for the total population and 118 for the population of working age; the latter figure is 142 in the new area and 114 and 92 in Old Mjini and Gichagi Village, respectively.

5.3 Households

Table 2 Number and Size of Households

	Old Mjini			Gichagi Vil.			New Mjini			Total		
	Own	Ten	Tot	Own	Ten	Tot	Own	Ten	Tot	Own	Ten	Tot
No. of households	55	232	287	40	148	188	24	346	370	119	726	845
Persons per household	6.5	2.2	3.1	5.2	2.5	3.1	5.5	1.9	2.1	5.8	2.1	2.6

Own = Owner Ten = Tenant Tot = Total

These data show that the average owner household consists of 5.8 persons, in contrast to the tenant households, which have an average size of 2.1 persons. As mentioned before this discrepancy is due to the differences in settlement pattern of these groups. In this paper data on household composition will not be detailed.

5.4 Density

Table 3 Densities and Occupancy Rates.

	Old Mjini	Gichagi Vil.	New Mjini	Total
Total No. of rooms*	517	335	465	1317
Households per plot	4.2	3.6	7.3	4.9
Rooms per plot	7.6	6.3	9.0	7.7
Rooms per household	1.8	1.8	1.3	1.6
Persons per room	1.7	1.7	1.7	1.7

*In this survey no distinction was made between occupied and unoccupied rooms, only the total number of existing rooms was assessed. Since a number of rooms were found vacant, the occupancy rates of inhabited rooms will be slightly higher.

The average number of rooms per plot in Mjini is 7.7 with the highest figure for New Mjini (9), and the lowest figure for Gichagi Village (6.3). In the latter case this is mainly due to the configuration of the plots, which does not allow for extensions of the original corridor-circulation Swahili house prevailing in the area. The number of rooms per plot correlates with the number of households per plot, although in New Mjini, a relatively high number (7.3) is found. More households in this area occupy one room only, as compared to the older areas, due to its more predominant "tenant character". The average number of persons per room is the same, 1.7, for all areas, which is rather low for a low-rent urban residential area (see * above).

5.5 Absentee Landlordship.

Table 4 Absentee landlordship per area.

	Old Mjini		Gichagi Vil.		New Mjini		Total	
	n	%	n	%	n	%	n	%
Owner living on the plot	55	81	40	75	24	47	119	69
Owner living elsewhere in Mjini	4	6	2	4	4	8	10	6
Owner living outside Mjini	5	7	10	19	19	37	34	20
Others (company, dead NK).	4	6	1	2	4	8	9	5
Total	68	100	53	100	51	100	172	100

The number of absentee landlords is far lower in the older areas than in the new Mjini, where more than half of the houses are only occupied by tenants. Although the owners are living on 119 out of 172 plots, a total number of 129 plots is owned by people of Mjini, some

owners having more than one house. As is stated in section 4.0, two thirds of the total number of house-owners are Moslem. The absentee landlords are found mostly among the non-Moslem houseowners.

5.6 Length of Residence

Mjini being an old established residential area, it is not surprising that 65% of the houseowners were born there or have been living in the area for more than 20 years. This figure is 85% for Old Mjini, 65% for Gichagi Village and 35% for New Mjini. The high percentage for the latter area, which was constructed only after 1970, shows that many people from the older parts of Mjini have built a house in New Mjini.

6.0 SOME ECONOMIC DATA

In this survey no data on the economic structure of the population have been gathered; this will be done at a later date during a separate survey on sample basis. Only a few relevant data have been collected.

i) Informal Sector

On 151 out of 172 plots, one or more rooms are sublet, while 21 plots, in the older parts of Mjini, are owner occupied only. Apart from sub-letting, hardly any informal sector activities are carried out in the area. In contrast to other majengos, only a few workshops, dukas, hotels or street-trades are found in Mjini (see also Fig. 2).

Table 5

Informal sector activities carried out in Mjini.

Type of activity	No. of plots
Charcoal selling	6
Grocery shop	11
Miraa shop	1
Hotel	1
Street trade	4
Total	23

This is probably due to the location of this majengo; it is separated from the business centre of the town by a rather deep valley, and thus attracts customers from Mjini area only. Many people may, in fact, be employed in the informal sector, but they do not work in Mjini itself. The main areas of informal sector activity in Muranga Town are the town-centre and the market centre south of Mjini, Mukuyu.

ii) Level of Rent

The average rent per room ranges from KSh. 10/- to KSh. 25/- per month. In Old Mjini and Gichagi Village monthly rents were most often KSh. 15/- per room, while in New Mjini rents of KSh. 20/- to KSh. 25/- per room per month were found, because of the higher general quality of the rooms (see section 7)

7.0 TECHNICAL DATA

7.1 Housetypes

The housetypes prevailing in the different areas vary considerably:

- i) In Old Mjini all houses are Swahili houses either of the corridor-circulation type or of the corridor-courtyard circulation type. (see Hoek-Smit, page 43). Since the plots are rather deep, this latter type prevails.

- ii) In Gichagi Village, where the houses are built on a rather steep slope, the plots are not very deep, but rather wide. This may be the reason that nearly all houses are Swahili houses of the corridor-circulation type, without a backward extension (see Appendix, Fig. 1). Next to most houses a separate structure has been built meant as a kitchen but at present used as a habitable room for subletting.

- iii) In New Mjini the houses are not of the Swahili-type, but are constructed in L , □ or □ shape, with all rooms opening upon a mostly unprotected courtyard (see Appendix, Fig. 2-5).

7.2 Quality of the Structures

Most structures are built in mud and wattle with roofs either of flattened tin (nearly all structures in the old parts) or of g.c.i. sheeting (in New Mjini) and floors of rammed earth.

The evaluation criteria used to assess the quality of the structures were the same as used for the Masaku majengo (Hoek-Smit, page 44). The different elements of the structures (roof, walls, foundation) were classified as satisfactory, improvable (needing major repair or gradual replacement) and non-improvable. This

paper summarizes only the over-all conclusion for each housing-unit; detailed information can be found on the individual data sheets.

Table 6 Quality of the Housing Units of Mjini.

	housing units		rooms	
	n	%	n	%
satisfactory	15	9	157	12
improvable	96	56	751	57
non-improvable	61	35	409	31
Total	172	100	1317	100

Of the total number of housing units one third is not improvable, while more than half can be improved and nearly 10% need no change at all.

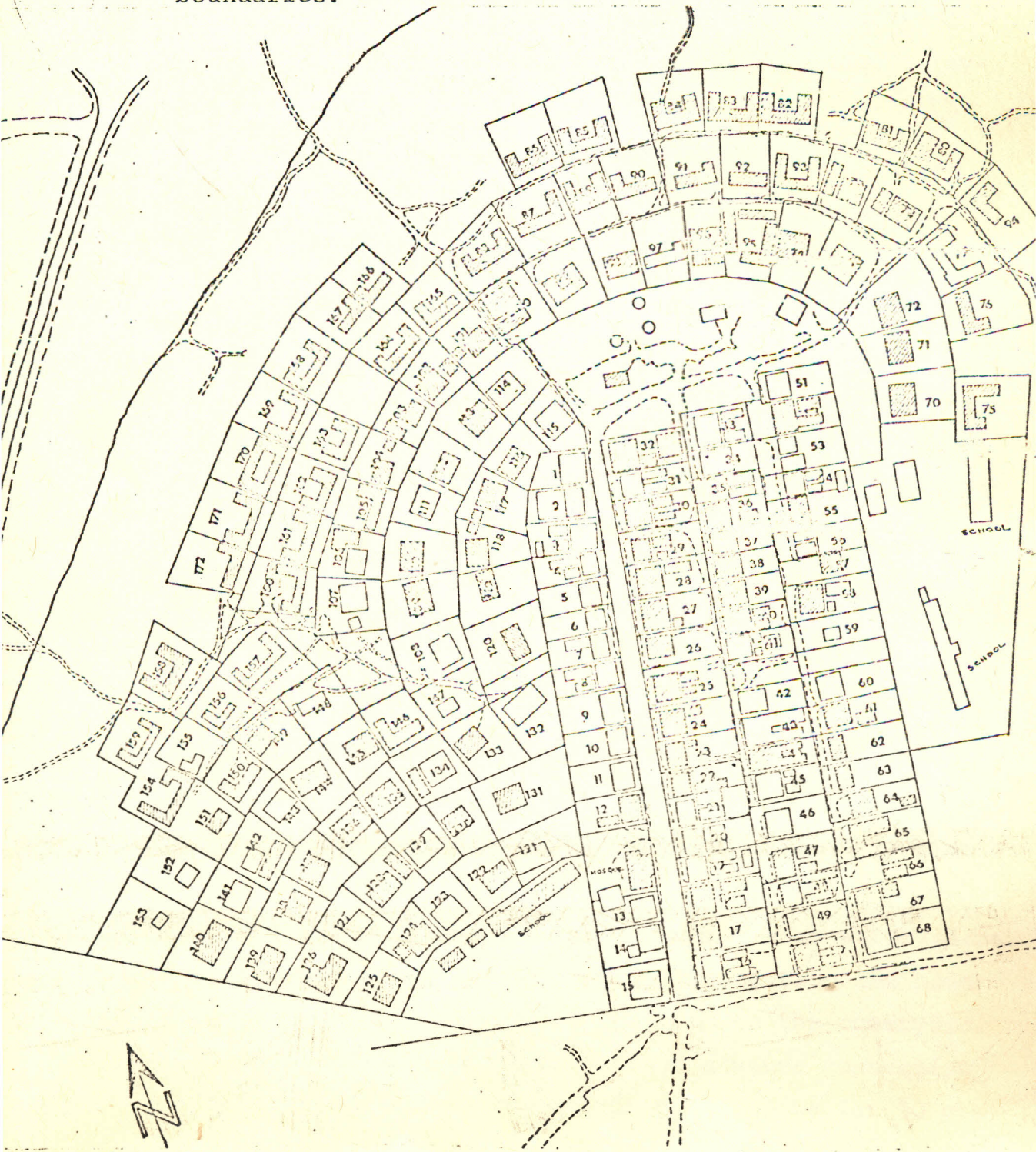
Since there is a considerable variation in the quality of the structures per area and upgrading of Mjini could well be considered separately for the different areas, it is of interest to detail the quality of the housing units for the three areas:

Table 7 Quality of the Housing units per area.

	Old Mjini		Gichagi Vil.		New Mjini	
	n	%	n	%	n	%
satisfactory	3	4	2	4	10	19
improvable	27	40	31	58	38	75
non-improvable	38	56	20	38	3	6
Total	68	100	53	100	51	100

In Old Mjini more than half of the houses are classified as non-improvable, while for New Mjini this is 6%. It is remarkable that even in New Mjini three quarters of the houses need considerable improvement. The findings of the technical survey are shown in Fig. 2.

Figure 2 Quality of Structures, Plot-use and Tentative Plot boundaries.



7.3 Lay-out

Although in the older parts of Mjini no formal plot-boundaries and road reserves were established by Government or Municipal authorities, the lay-out of these areas is very regular, following the topography of the terrain. This is a common feature of most majengo areas, because the Moslem leaders of the community were made responsible for the orderly development of the total area allocated to the community. New Mjini has a lay-out that follows the topography of the terrain, with very narrow footpaths between the houses.

7.4 Plot-use

Apart from the plots where the mosque, the nursery and the two primary schools are located, all plots are used for residential purposes and only on 13% of the plots some commercial activity is taking place (see section 6.0). On many plots banana or mango trees are growing, and even some maize is planted in Old Mjini, where space allows for it. The large plot of the former administrative police in the middle of the area is only partly used for residential purposes.

7.5 Infra-Structure

- i) There is no sewer system in Mjini and most people have pit latrines. Only 3% of the houses do not have any latrine facilities.
- ii) All plots in the area are accessible to water mains. On nearly half of the plots a connection has been made and a standpipe is provided in the courtyard. People living on plots without a water connection fetch the water from neighbouring plots (at 20 cts.

per debe). There is no water kiosk or public standpipe in the area.

Table 8 Water facilities per plot.

	Old Mjini		Gichagi Vil.		New Mjini		Total	
	n	%	n	%	n	%	n	%
Standpipe	27	40	17	32	32	63	76	44
No water	41	60	36	68	19	37	96	56
Total	68	100	53	100	51	100	172	100

- iii) There are no stormdrains and the deep red soil that covers the upper part of the ridge is eroding, especially in those places where traffic passes.
- iv) Roads are of earth and ungraded. Only on top of the hill the road reserves are wide enough to allow for vehicular traffic. On the slopes they are very narrow, especially in New Mjini.
- v) The area is connected to the electricity network, but only a few houses have private connections and only part of the main street in the area has streetlights.
- vi) No regular garbage collection is organised and people seem to bury it on their plots or dump it in a pit.
- vii) Telephone connections are not available in the area.

8.0 SOME CONCLUDING REMARKS

- i) The difference between the areas in physical characteristics, lay-out and quality of the structures are considerable, so that different approaches in planning of the areas may be necessary. While the lay-out of Old Mjini is very suitable for upgrading, especially for providing infra-structural services, it has at the same time the poorest quality of structures. For New Mjini the situation is reversed; although the quality of the structures is fairly good, the lay-out especially concerning the road reserves may make considerable demolition necessary.

- ii) The majority of the population of Mjini are tenants, paying a very low rent. Their places of work lie mainly outside Mjini, but since Mjini is situated centrally in the town, the distances to work are not inconveniently long. The owners are more dependant on the area, (at least for part of their income) because of subletting. These facts are important to take into consideration for an upgrading plan for the area (e.g. house-design, level of improvements).

- iii) At present, plotholders have only a temporary right of settlement in the area. A first requirement for improvement is to establish definite plot-boundaries after a new cadastral survey, and to issue letters of allotment to the plotholders. This in itself may give them sufficient incentive to improve their houses to an acceptable standard, even if no materials loans were provided. It might be considered to make the issue of titledeeds conditional on the prior improvement of the structures. (See NHC, Page 6 and 7).

sufficiently flexible to take a fair degree of movement) with masonry construction.

The advantages of prefabricating timber frames in jigs on site have been stressed by P.A. Campbell and K. Malde (Plaster as Cladding for Timber Frame Houses, Occasional Paper No. 6. Dept. of Civil Engineering, University of Nairobi 1973). If timber frames are to be constructed in-situ, moulded timber of reasonable quality is usually required. However, if the frames are prefabricated low grade timber can be used, since it much easier to take up dimensional defects, by cutting to fit, packing out etc. when the frames are made in a jig.