THE ROLE OF SMALL SCALE INDUSTRY IN THE LOW INCOME HOUSING COMMUNITIES.

A CASE STUDY OF MOROGORO URBAN.

A Thesis submitted in part fulfillment for the Degree of Master of Arts (Planning) in the Department of Planning, University of Nairobi.

By Samuel Mkwavi Mghweno.

June, 1977.

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"DEDICATED TO MY BELOVED PARENTS".

This Thesis is my original work
and has not been presented for
a degree in any other University.

.....

S.M. MGHWENO
Candidate

"This Thesis has been submitted
for examination with
..... approval
as University Supervisor".

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I alone accept full responsibility for any errors in this work.

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A B S T R A C T

The thesis topic "The Role of Small Scale Industry in the low - income housing community, a case study of Morogoro Urban", aims at harmonizing the conflict of land use between small scale industrial development and residential community. A planned community has been taken as a well planned housing with open space, schools, health facilities, community centre and easily accessible commercial centre. The study is an attempt to introduce small scale industrial activity within the residential community, as a way of solving some of the prevailing urban employment problems.

To most people industry is unpleasant with nuisances such as dust, noise, smoke, and smells. In terms of location it is associated with the industrial zone of the urban land use. The study shows that such ideas are over generalized. The study found that there are industries in the residential community which have received little attention in urban planning and yet produce a considerable variety of industrial products. This work is often carried on in verandahs, backyards, unfinished houses, under a tree, open space and even in living rooms of houses. There is great danger that industrial processes carried on, in unsatisfactory premises such as these might cause problems to its enevironment if certain measures are not taken in urban planning process.

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The provision of small scale industrial estates at the industrial area will not attract these entrepreneurs. Their business are often closely integrated with the life, labour and market of the community and in any case they have not the financial resources for such a major upheaval. The people in the community with small scale industries tend to be owners of these entreprises. The enterprise act as an agent for employment and a source of income. It is, therefore, a product of their struggle to earn a living. Most of them would like to organise their activities where they are located at present.

The study, therefore, recommends the followings:

1. Establishment of industrial co-operatives or Ujamaa ownership bases where common faclities will be provided.

2. Establishement of Industrial Community Centre, responsible for provision of raw materials, training and marketing.

3. The provision of Neighbourhood Industrial Worksheds. These sheds are recommended to be strategically placed in the low housing community to utilize the community labour and market.

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4. The provision of Industrial Estates, which will house somewhat more sophisticated industries than in the Nei ghbourhood Industrial Worksheds. The estate should be located in the industrial zone of the town.

5. It is also recommended that while encouraging labour intensive industries, Small Industrial Development Organization SIDO, should work towards the establishing more advanced small scale industries.

6. Establish industries producing constrction materials to improve low - income housing, as well as constructing Neighbourhood Industrial Worksheds and many other type of building projects in the area.

7. Establish industries producing simple consumer goods and services to meet the needs of the expanding internal market accompanying increased incomes.

8. Training for the development of Small Scale Industry is very important, therefore, Mobile Training Units, is recommended for Morogoro Urban District. This is an economical method of taking training to the people in their own

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environment, hence the best method of utilizing all available resources during training.

The study concludes by recommending that participation of the people in the planning process is paramount for the success of the above recommendations.

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CHAPTER ONE

I N T R O D U C T I O N

1.1 GENERAL PLANNING PROBLEM:

> "There is high potential in much of her soil, much of it still unexploited, there are other natural resources awaiting development. There is also a great reservoir of undeveloped human capacity. How does this tantalizing situation arise that resources are there and people are there, yet the two cannot be brought into productive union."[1]

The development of crafts and small scale industry is as old as man. Skills and craftsmanship developed to produce tools and other essential required for their lives, including blacksmith, pottery, basket and matweaving. Artistic activities such as wood carving grew up too. Such activities normally took place within the homestead or near the source of raw materials.

As urban development took shape in Tanzania, these small scale industries also emerged in the urban economy. As a means to meet the local demands initiated by urban agglomeration of activities for example household goods and certain building materials. Their existence in urban areas was not taken as an important viable resource for urban development by the planners in the country.

Until 1962 urban planners took little interest on the role of small scale industry in the urban economy.

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The urban planning regulation and urban development programmes such as housing gave no allowance to such activities, which are directly related to the livelihood of the community. The approach provided no premises for such economic activity. Instead more sophisticated and outward oriented industrial development took shape in which the local small scale industrial activity was brought to a standstill.

Furthermore the importation of such goods like hoes, knives, mats etc. accelerated the problem of small scale industries. "Their exploitation was multiplied, yet its fruits were not increased by their productive wealth; these went abroad or served to support a parasitic bourgeoisie at home. They lived in abysmal; yet they had no prospect of a better tomorrow. They existed under capitalism, yet there was no accumulation of capital. They lost their time - honoured means of livelihood, their arts and crafts, yet there was no modern industry to provide new ones in their places"[2]. Hence, given the urban planning regulations, the development of more sophisticated and outward oriented industries and the importation ofcertain goods discouraged the development of these industry in the country and especially in urban areas, due to the fact that most of these new developments were first introduced in the urban areas.

The present urban planning in Tanzania is very little different from the pre 1961 planning. "The aim of traditional town planning in many African countries, supported by both colonial and independent government was essentially to provide for the physical accomodation of development, meaning the

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orderly fitting in of externally initiated investments on an adhoc and piecemeal basis to hold the ring of private actions within the bounds of some overall design concept. The deliberate conception ofa a master plan carefully prepared on basis of deligent surveys, producing an architectural design for a decade or two ahead, highlights the static and regulative style of much precious physical planning ideology"[3].

The current programme of urban upgrading of unplanned settlements heavily emphasizes physical correctives to the problem. Urban planning and housing people in Tanzania ~~hae~~ have frequently been accused of assuming that upgrading automatically effects human mental health, leading to better jobs and higher income. Surely, these people are sophisticated professionals who recognize the upgrading programme as a complex one that calls for treatment beyond the remedies applied by architects and contractors. But, anxious to get started some place, they quite naturally choose to begin on their home grounds site planning and housing designs. "One redeeming feature these projects have for their occupants but hardly for the city or nation, is that they can often successfully resist paying their monthly quotas. In these very frequent cases, the entire enterprise is an extremely wasteful way of giving money away, if only one third was given directly in cash, the people would have made far better use of it, bothfor themselves and certainly in the great ~~manority~~ majority of a cases, for society as a whole..... that these

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centrally administered, packaged deals built by big contractors and funded by big banks generate less low income employment than would be demanded through supports for traditional systems that they increase the maldistribution of personal income between classes and regions that they, therefore, accelerate rural urban migration and premature urbanization of the cities and that they also increase the dependency of the poorer nations that practise such programmes on the wealthier who finance them or which profit from the business they generate..... far from being a life support and life giving process and environment the project is a burden to its inhabitants and, especially if the latter resist paying, it is a burden to society at large" [4].

The current programme of urban upgrading programme, without a strong programme in employment counselling, vocational retraining, and general adult education is not only unlikely to raise the socio-economic level of the unplanned settlement dwellers in significent amount, but is almost equally unlikely to even keep pace with the prospective rate of unplanned settlement growth. In other words upgrading programmes without ensuring a similar economic earning capacity would likely lead to the replacement of the population planned for by another higher income groups of the population from other parts of the town. Unplanned settlement might, therefore, be a continuous process, since the displaced population would have to settle in an unplanned available location.

A new kind of urban planning which will assess the

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availability of resources on national and local level is needed. It is the only solution if the future urban plans are to be realized.

In this study we shall be looking at the note of small scale industry in the low income housing community as one of the urban resources, a case study of Morogoro Urban. It will highlight the note of small scale industry inproviding employment, its contribution to the nation GDP, and in the construction industry within the urban area.

The study centres its analysis in the low income housing communities because it assumes that the majority of the people affected both economically and socially by the present urban planning approach live in these areas. The target population for the study are, urban indeginous dwellers, urban ew workers family members, and their dependants. These groups of people can hardly leave the urban area, to look for job opportunities in rural areas. The Migrant labour, these are those people who are whole looking for employment and these are ready to take a job regardless of location. The location might be rural or urban. This type of employment problem can be tackled on the national level rather than on one particular community. The study centres on the community participation in decision making of the plan, therefore, to involve migrant labour which by their very definition are mobile, it makes the whole programme impossible.

Another important point here is that the successfulness of the National Policy on rural development will reduce if not completely stop rural-urban migrant in the country.

The first group of people can hardly leave the urban area even if a job opportunity is ensured somewhereelse. In this case, they are to some extent an immobile labour force. This group is immobile from a social cultural and economic point of view. Therefore, urban planners have to plan for such groups in order to rey to avoid any repercussione on urban land use and income distribution among the urban community.

Therefore, given the lack of time and the lack of real resources to invest in more complex projects in urban areas, the problem becomes acute. There is a serious possibility that the situation will continue to deteriorate without new thinking and new policies on physical planning at national and at local levels to find possible solutions in the face of accelerated urbanization.

To conclude, the real problems are the old plans did not identify small scale industries, while the new plans did it indirectly; the urban community participation is not utilized fully, and there is no urban planning industrial strategy.

1:2 URBANIZATION AND EMPLOYMENT:

The present urban population annual growth rate in Tanzania is estimated to be 6 percent"[5]. This growth rate is extremely high as compared to the growth of urban employment sectors and the speed of the provision of urban economic infrastruture.

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The high rate of urban population increase is due to; rural-urban migration, urban population naturally increases and the extention of township boundries. The slow growth rate of urban employment sectors and the provision of urban economic infrastucture is due to lack ofenough resources plus the Government commitment to rural development.

1:3 OBJECTIVES OF THE STUDY:

The study present the role of small scale industries in providing employement to the people living in the low income housing communities in Morogoro Urban. The development of small scale industry in Tanzania has been taken as one of the agents for providing employment due to its labour intensive nature and its low cost of fixed investment. The provision of employment is not the end in itself but a means to raise their standard of living and their contribution to the national GDP. In Tanzania, therefore, the development of small scale industries is considered as part of intergrated regional development, and answer to some of the problems which need urgent solutions such as increasing employment, mobilizing local resources in capital and skills, providing goods and services to the community, as a strategy for the development of planned import substitution industry and achieving a more equitable distribution income. The study is based on four objectives.

The first objective is to find means by which the national policy on Ujamaa (Socialism) and Self-reliance can establish a viable socio-economic organization for the residents of urban low income housing communities.

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The objective is geared to the priorities of the people in relation to the development of small industries. It is therefore, the needs of the people to be identified. To fulfil this participation of the people is paramount.

The second objective is to establish an industrial development hierarchy, in relation to location and working organization for small scale industries. This objective will highlight the types of industrial sheds for small scale industries. These sheds will be of three categories, the industrial community centre, and the neighbourhood Industrial worksheds, based on the concept of utilizing particularly partially employed housewives and others for producing handicrafts and other labour intensive ancillary components using simple appliances and non-anxious processes at a neighbourhood shed; The sheds are to be strategically placed in the urban low income housing community so that minium transportation will be needed for the part-time workers; and the industrial estate worksheds which will house more sophisticated small industrial zone of the urban development.

The third objective is to link the low-income housing with small scale industrial activities. The small scale industrial activities is expected to create job opportunities for the people living in the area. Therefore, strengthening the provision of low-income housing programme with small scale industrial development programme.

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The fourth objective, which is a part of the above, is to identify the potential labour force and organization for small scale industries. This highlights the fact that there are people who can hardly leave the urban residential area to look for job opportunities elsewhere and for whom, the back to rural areas movement hardly has any appeal. The planners will have to accept the various social and environmental differences among the Tanzanian people requires a differently designed programme. Solution, therefore, within the urban social-cultural environment will have to be found. In the study the target population which will participate in this programme will be, the indigenous urban dwellers, the housewives, children and dependants. The participation here does not refer to one individual in the family but the whole family in economic activity. Therefore, employment in this respect is not only the head of the family but the whole family.

From the above objectives the research will be based on the following goals:

(i) To identify the needs of the community in relation to small scale industries;

(ii) To identify industrial possibilities of specific areas;

(iii) To identify viable small scale industries which may be located in the low-income housing communities;

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(iv) To help in locating industrial common facilities and other development activities within the Morogoro urban;

(v) To help in financing small scale industry and;

(vi) To support and recommend an action programme.

1:4 NATIONAL POLICY ON SMALL SCALE INDUSTRY:

The Government of Tanzania under policy direction contained in the Arusha Declaration, from TANU Bi-annual conferences and from continued discussions have emphasized the Ujamaa and Co-operative application to small scale industrial development. Consequently, almost all regional plans for expansion of small scale industries fall within these organization structures.

Through the establishment of a national body, Small Industrial Development Organization (SIDO) the Government of Tanzania intend to provide assistance in the planning process, technical advice, organizational know-how, feasibility studies, capital requirements, marketing and in the acquisition of raw materials. The Ministry of Industries along with SIDO, the Ministry of Finance and Planning and the Prime Minister's Office are all conscious of the need of small scale programmes to contribute to the total industrial needs of the nation i.e. the production of a component by a small scale industry for use by a large industry.

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The Director-General, SIDO, quotes his translation of Resolution No.18 of the TANU Bi-annual Conference of September 1971, "The TANU Bi-annual Conference recognized the wealth of our existing natural resources such as minerals, water, fishery, forestry, etc. and, therefore, emphasizes on the need to utilize these resources in order to expand the economic base of our nation"[6].

In a TANU Directive of February, 1971[7], on small industries their importance has been stressed as follows:

(i) Small scale industries are necessary in a society long exploited, which does not have much sophisticated know-how and capital, they can be started and run by people themselves, especially if they do so on a socialist bases.

(ii) In Ujamaa and Development Villages, agriculture dependent on the rainy seasons dees not provide full-time peasant occupation. This also apply to urban fringe agriculture activity. Small scale industries can meet some of their needs anddiversify their activities throughout the year.

(iii) Small scale industries is required to help with high unemployment by engaging in productive activities.

(iv) Small scale industry will help Tanzania realize the objective of bringing about the technological revolution.

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(v) Small scale industry is essential in the implementation of the policy of self-reliance and in eliminating some of the disparities which now exist between communities.

1:5 THE SIGNIFICANCE OF THE STUDY:

The significance of this study ofsmall scale industries in urban low-income housing communities can be summarised as follows:

(i) It will involve the residents in development projects which affects their life, hence protecting and maintaining the project without full government support.

(ii) It will introduce and strengthen the local contractors.

(iii) It will identify appropriate land-use plan for the low-income housing community in respect to their social and economic aspect.

1:6 STUDY ASSUMPTIONS:

Five assumptions have been set for this study.

(i) that there is an employment problem in Morogoro Urban both numerically and qualitively;

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(ii) the employment problem is mainly caused by the inability of the modern sector in labour absorption capacity;

(iii) that due to low absorption capacity of the modern sector, has caused high growth on the urban 'informed sector' for example small scale industrial activity;

(iv) the growth of small scale industry on the low income housing community has brought about misuse of urban land;

(v) and that small scale industrial activity can be made a viable socio-economic activity in the community.

1:7 RESEARCH METHODOLOGY:

1:7:1 Survey:

This survey was intended to identify the potentiality of small scale industries in providing employment for the people living in the low income housing community in Morogoro urban. However, to accomplish this two important constraints of time and labour had to be overcome.

The period August 5th 1976 to September 15th 1976 was the time the survey was conducted.

1:7:2 Sample Frame:

The sample frame was a 1963 typographical maps to the scale of 1:2,500. These maps (see map in back cover)

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identified all the houses within the study areas. Acount showed them to be 6,700 in the planned area and 1,500 houses in the unplanned areas.

In case of larger industrial development the map attached shows their location within Morogoro Urban area. For small scale industry little information was available before the survey, the attached maps show their location after the survey.

1:7:4 Sample Design and size:

Because of the difficulties encountered in identifying the individual houses from the typographical maps, limited use was made of this sample frame. Instead, detailed identification of the houses was carried out by a ground inspection. The area was divided as far as possible into four equal sections of eight houses moving along the street. Finally one house was randomly chosen from each section, by the drawing of ships paper. The design could be described as a sectionalised cluster random sample. The sample covered 175 household which is 3,5 percent of the total households in the high density communities in Morogoro Urban. In case of small scale industries they were estimated to be 500 in the urban areas, however, it was difficult to identify them as most of them are partially part-time, some seasonal and some do notfall in our study area. The survey managed to identify 147 units in which information was obtained.

On medium and large industries a complete survey was conducted and 24 of such industrial establishments were identified by the survey.

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1:7:5 Method of Data Collection:

The data was collected through questionnaires. Basically these questionnaires were divided into four; household socio-economic, medium and large industries, small scale industries and markets for small scale industrial products. See Appendix A, B, C and D.

1:7:6 Pilot Study:

In order to test the effectiveness of the questionnaires a pilot study was conducted. This study revealed that, an interview would not be less than thirty minutes.

1:8 DEFINITION OF TERMINOLOGY USED:

It is necessary to make clear the following terminology which is going to be used very often in the study.

1:8:1 Small Scale Industry:

With respect to the definition of the term small scale industries no definite agreement has existed among economists and planners, since the definition itself is used only relative to the objective and the industries the analysists have in mind. As might be expected too, the wide range of environments in countries of different stages of development.

There are generally two approaches to the problem. The first approach is a quantitative measure, such as employment, employment with power, horse power capital equipment at some convenient valuation. A definition based on statistical hence has been suggested for the purpose of international comparisons.

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There are, however, prominent difficulties with such an approach; the economic variables such as physical size, capital equipment, size of supervisory staff and output which have as much claim on the title as employment do not necessarily correspond empirically, producing as it were paradoxes of interpretations. Several authors have tried to look in this problem.

(i) Allwood, M[8]. From his work where persons per plant can be compared with horse-power per motor. While lack of correspondence itself is a serious defect in connection with a definition in terms of employment. At the same time units of labour are not as comparable internationa ally as one mightlike them to be. Tanzanian workers simply are not Japanese workers in a sense which can make casual comparison obscure.

(ii) Basu S.K.[9] suggests that with employment criterion, we can conclude some other complementary variables. He too suggests incorporating the number of workers with the stage of development of the country. When international comparisons are desired, such a procedure introduces the difficult problem of measuring development in some way for example investment per worker.

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(iii) Florence P.S.[10], presents by for the most detailed appraisal of this possibility. He suggests the "horse power per worker", not only is intuitively, satisfying but also possesses the following objectives advantages, it is comparable internationally, it is not arbitrary, it is not dependent on the price level and it measures what is meant by capacity of equipment.

The second approach is known as functional, the principal advocate of the functional approach to the problem of definition is Eugene Stanley [11], who has popularised the following list of functions of small industries with the intension of emphasizing how they might differ from larger sized undertakings. To Stanley, small scale industries includes non-factory types about which there is no particular ambiguity and factory types with the following characteristics or functions:

(i) Relatively little specializations in management.

(ii) Close personal contact of top-management with production workers.

(iii) Lack of access to capital.

(iv) Often relatively close intergration with the local community.

E. Staley focuses to what might be termed as the problem of small units.

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It shows from the above survey that, most writers on small scale industries have the problem of what they mean by small scale industries. From the country point of view the following countries present the diversity in definition.

In India, [12] the Government's programme for small scale industry assist units having no more than 500,000 R of fixed capital in certain cases not more than, 1,000,000 R. Formerly there was also the limitation, on more than 50 employees with power or 100 without power. But this employment limit was removed in 1960 for a number of reasons, among them the thought that there should be no disincentive to growth, especially growth in employment. The small scale industry programme, therefore, focuses almost entirely on small factory.

In Japan [13] they recognize small scale industry to have an upper limit of 300 employees with a capital limitation of 28,000 U.S. dollers.

In United States of America, [14] a manufacturing firm is officially a small business in connection with government procurement orders if it is not dominant in its field of operation and has few than 500 employees, if it is certified as small by the Small Business Administration. For eligibility to benefit from small business loans and technical and other assistance, it is classified as small if it has less than 250 employees, as large if it has more than 1,000 and within the 250 to 1,000, range as either small or large depending on size standards set by the Small Business Administration for particular industries.

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In Sri Lanka [15], small scale industry is officially divided into:

(i) Cottage industries carried on wholley or primary with the help ofmembers of the family either as a whole or part-time operation;

(ii) Handicraft industries, products in character requiring traditional traditional skills or craftsmanship in their manufacture and;

(iii) Small Industries, usingpower but capital investment in machinery and equipment not over 4o,000 U.S. dollers.

In Tanzania, [16] a small scale industry in our content is defined as any unit whose control is within the capacity of our people individually or collectively in terms of capital required and know-how. Handicrafts are included in the definition. The definition has deliberately avoided the use of internationally recognised criterial such as size of capital or the number of employees etc. in order to provide for more flexibility in our own content of socialism and rural development. The definition is therefore, meant to be a guidance for action and nota water-tight formula.

From the above survey itis clearly shown that there is no accepted internationally definition for small scale industry. A small scale industry in United States, India and Japan might be large industry in Tanzania and

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Sri Lanka. For the purpose of our study we shall adopt Tanzanian definition.

1:8:1 Low Income Housing Community:

By "Low Income Housing" we mean housing that the average urban dweller in Tanzania earning a monthly income not more than 740 shillings can afford. This essentially means unit renting at less than 120 shillings per month. A unit here may be a room or a complete house.

In Tanzania and particularly Morogoro Urban, low income housing may be divided into three categories namely traditional, swahili and low cost National Housing Corporation houses.

The location of these low income housing in Morogoro can be traced on historical perspective only. For much of the colonial period Africans were temporarily urban dwellers while Asians and Europeans were permanent urban residents, since Africans happened to be the poorest and also taken to be temporary residency, different type of infrastructure provision were made for their community. "Under the British town planning practive divided the towns for residential purpose, into low-density, medium-density and high-density areas. The division was based on size of plots, the level of development required per plot and the standard of services provided" [16]. After 1961, Africans

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moved into both medium and low density, this movement being based on income rather than race for this respect, the high density area has been given to the less privileged people. In Morogoro Urban the area for low-income housing communities which follow in our study are, Kichangani, Msamvu and South-West of the East Africa Railway.

This study is, therefore, located in the high density area. Since one of the objective of urban policy in Tanzania is to reduce as far as possible inequalities in living standards, an investigation on socio-economic status and small scale industries phenomenon are of particular importance.

1:8:2 Employment:

The awareness of employment problem in Tanzania came not from the statistics but from the people seen in main towns who obviously had nothing to do. These people are either loitering or having petty trade.

The definition of who is unemployed or under employment like the definition for the small scale industry, many authors have tried to define relative to the objective and employment problem the analysists have in mind.

The study is going to look on employment problem as defined to be, a person who has no opportunity to perform fully those tasks for which he is culturally adopted.

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The problem of encouragement of small scale industry development in the low income housing community must not be viewed simply to achieve an overall aggregate increase in employment of given order but to see that it is generated in those areas and those sectors in which it is most needed.

1:9 CHOICE OF MOROGORO URBAN:

One of the major objectives of Tanzania's urban development, is to reduce the comparatively high growth rates of Dar-es-Salaam to other urban areas in the country. In the past five year Development plan 1969/70 - 1973/74 Morogoro Urban was given very high priority on industrial development i.e. Morogoro Leather Complex.

Other than the national urban development objective Morogoro Urban has more certain potential than most of the urban areas in the country. This potentiality can be seen in terms of economic infrastructure links with other urban centres. Morogoro Region today is served by three all season routes namely Tanzania Zambia Railway, the East Africa Railway and Tanzania Zambia Highway. Again there is a new proposed highway to link Dar-es-Salaam and Dodoma by connecting Morogoro to Dodoma, the new national capital.

It is these growth potentialities, which made me to choose this town for study. Another reason is the

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availability of information especially the Master Plan for the town. Today, Morogoro urban has a population of about 50,000 with population growth rate of 7 percent per annum.

1:10 STUDY LIMITATIONS:

The main limitation on this study is lack of related information in the country. Official statistics do not lend themselves to making precise statements about the extent of small scale industries in any given industrial sector of the country economy. In the absence of reliable figures, this study relies heavily on the survey made in August, 1976.

1:11 CONCLUSION:

The planning problem can be summarised as lack of direct urban planning support for small scale industries, low level of urban community participation in urban development projects and lack ofurban planning industrial strategy. At the same time, there is high rate of urbanization which isunfortunately accompanied by low level of urban employment growth.

The objectives of the study are, to find means ~~of~~ by which the national policy on Ujamaa and Self-reliance can establish a viable socio-economic organisation for the residents of low income housing communities,

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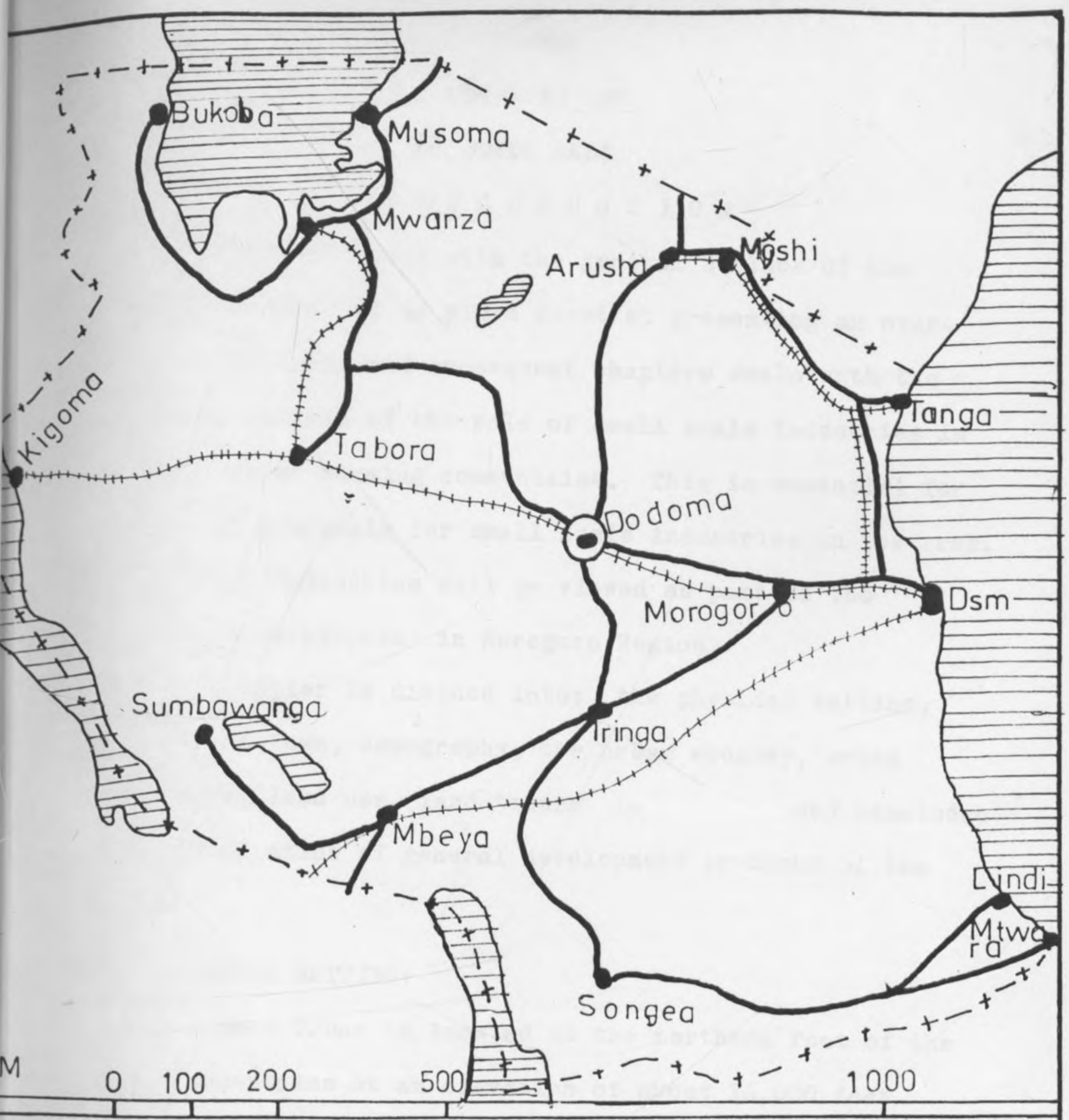
establishing an industrial development hiererchy in relation to location and working organisation for small scale industries, linking the low income housing with small scale industrial activities, identifying of potential labour force for the small scale industries and to recommend anaction programme.

The National Policy on small scale industries, clearly states the need and importance of the sector in the economy and various Government and Party directives have indicated this very often.

The definition of small scale industry, in the study would be, any unit whose control is within the capacity of the Tanzanian people in terms of skills and capital, while low income housing community would be refferring to the high density residential area of Kichangani, Msamvu and South-West of the East Africa Railway, in Morogoro Urban.

The main limitation for the study is lack of related information in the country.



MOROGORO URBAN

NATIONAL SETTING

Legend

National Boundary

Railways

Trunk Roads

By S. M. Mghweno,
Department Of Planning,
June, 1977.

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CHAPTER TWO

STUDY AREA

2.I I N T R O D U C T I O N

The chapter deals with the general outlook of the Morogoro Urban. It is aimed first at presenting an overview of the area, and subsequent chapters deals with the detailed analysis of the role of small scale industries in the low income housing communities. This is essential for drawing up proposals for small scale industries in the area. Small Scale Industries will be viewed as part of the integrated development in Morogoro Region.

The chapter is divided into: the physical setting, role of the town, demography, the urban economy, urban infracture, land use, land tenure and concludes by identification of general development problems of the area.

2.2 PHYSICAL SETTING:

Morogoro Urban is located at the northern foot of the Uluguru Mountains at an elevation of about 16,000 feet several minor stream from the mountains, run through the town. The largest, the Morogoro River, is the main source for the town's water supply.

In general the climate in Morogoro is more pleasant than on the coastal plains with temperature averaging 10 degrees cooler than on the coast, and a lower humidity rating, with cool night temperatures. "It has an annual rainfall of 1,000 - 2,000"[18].

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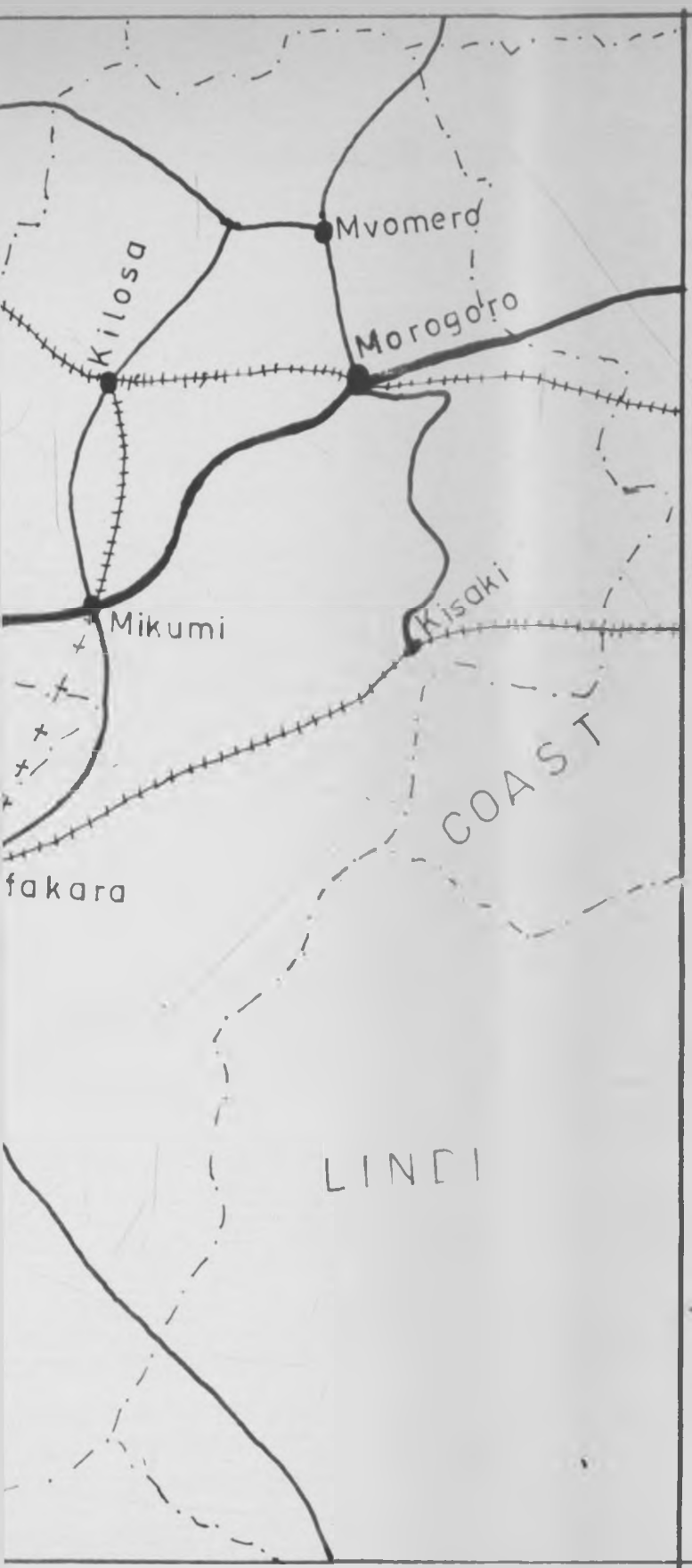

LEGEND

Regional Buondary

Roads

Tazam Highway

Railways

Proposed Railway Link

RO URBAN

NAL SETTING

By S. M. Mghweno
Planning Department
1977

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10 0 20

N

Physical Setting

Rivers

Railway

Town Boundary

Urban Area

Contours (m)

By S. M. Mghweno,
Department Of Planning.
June, 1977.

RO URBAN

no 3

Scale: 1:50 000

N

The natural vegetation is grass and sporse trees, the main induced crop is sisal both offer little comfort from the heat. On the hill slopes towards the mountains, however, trees are plentiful and this area is suitable for urban development.

2.3 ROLE OF MOROGORO URBAN:

"Morogoro is a town of 50,000 inhabitants"[19] and serves as a main transportation mode for traffic from south-west and north-west Tanzania and Zambia, and as a main centre of the central line of East Africa Railways. The town is largely dependent of its transportation function in developing its complementary commercial and manufacturing facilities to date, and in assuming the function of a distribution centre to funnel the flow of goods into the regional population, where there are good markets and sources among agricultural estate and cash-crop farmers. Morogoro also serves as a major educational centre in Tanzania primarily for teacher training, business administration and agricultural science institutes. Large institutions of these purposes are located near the town.

2.4 POPULATION:

Morogoro had an estimated population in 1967 of approximately 25,000. Population increase in Morogoro town has kept pace in the past with the national urban average of approximately 6 percent, although since 1967 it is slightly lower than the national average. It is estimated that the current population is approximately 50,000. By 1980 Morogoro is likely to have a population of 60,000.

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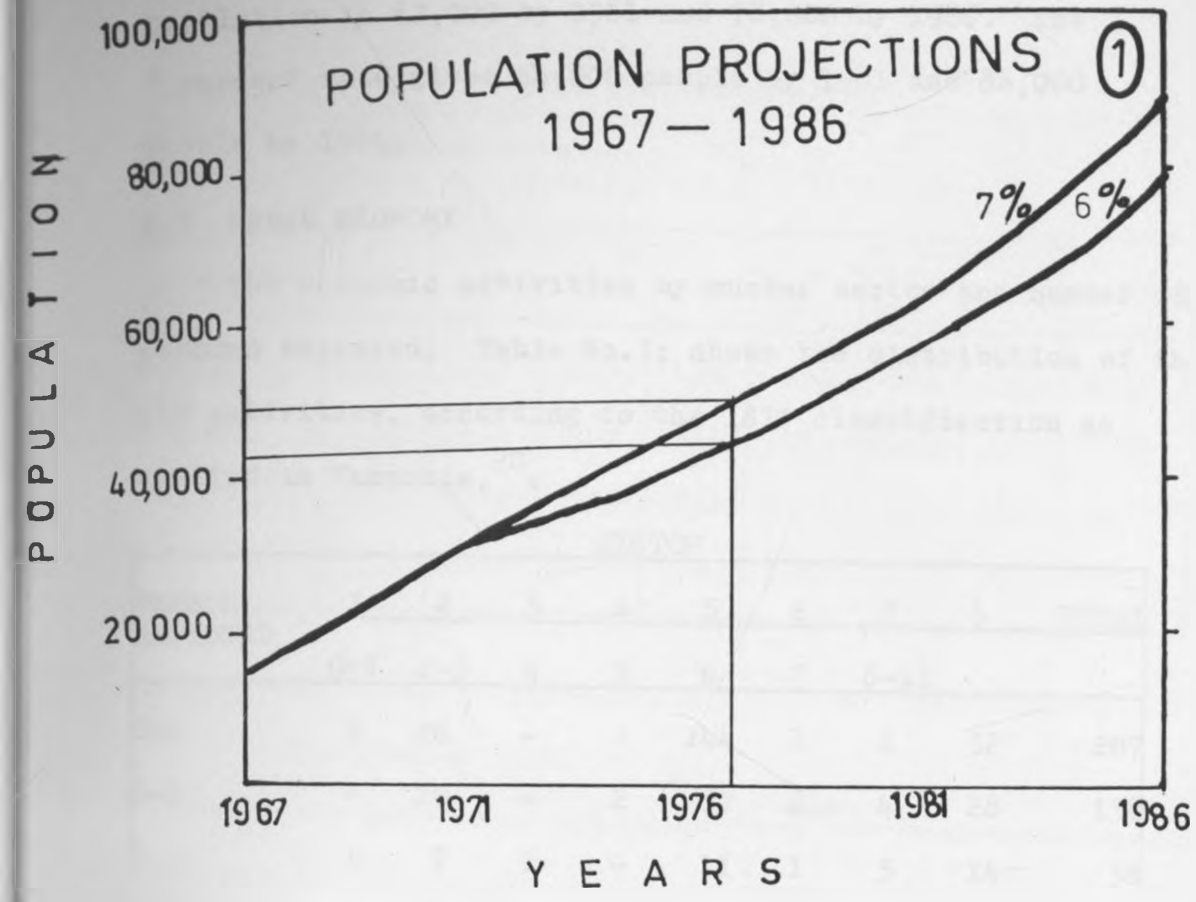

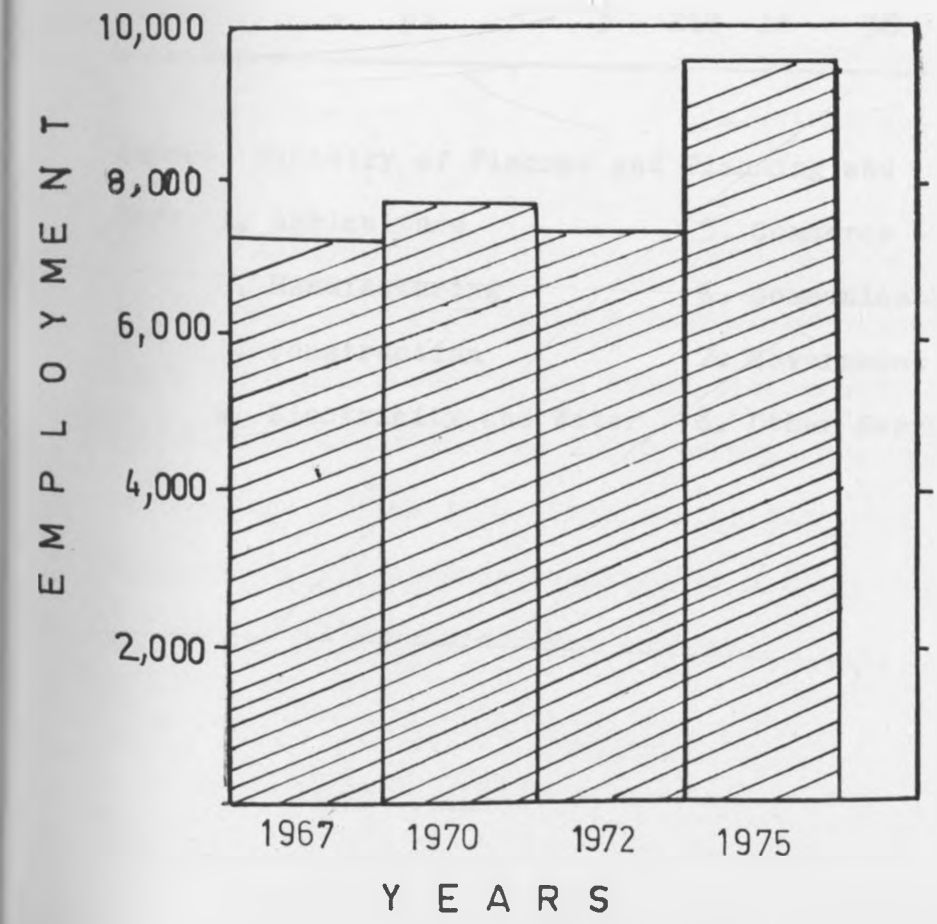

EMPLOYMEN
TREND 196
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②

Based on the 6 percent growth rate, the projected population is 62,000 by 1981 and 78,000 by 1986. The 7 percent rate gives 64,000 people by 1981 and 88,000 people by 1986.

2.5 URBAN ECONOMY

The economic activities by number sector and number of persons employed. Table No.I; shows the distribution of the 442 activities, according to the ISIC classification as applied in Tanzania,[20].

PERSON EMPLOYED	SECTOR								
	I	2	3	4	5	6	7	8	TOTAL
	0-I	2-3	4	5	6	7	8-12		
0-2	2	26	-	-	144	1	2	32	207
3-7	-	20	-	2	82	2	4	28	138
8-14	1	7	1	-	11	1	3	14	38
15	1	12	2	1	5	7	25	6	59
TOTAL	4	65	3	3	242	11	38	80	442

Source Ministry of Finance and Planning and

Key: 1. Agriculture
2. Manufacturing
3. Construction
4. Electricity and Water
5. Commerce
6. Communication
7. Government
8. Other Services

.../27

The number of persons employed since 1967 are shown in the table below:

TABLE NO.2 The Number of Persons employed by ISIC sectors*

SECTORS	1	2	3	4	5	6	7	TOTAL
1967	2430	597	282	84	889	684	2366	7332
1970	580	1690	640	840	360	1250	2400	7800
1972	77	2312	176	112	1126	219	3461	7473
1975	319	1880	1489	1046	1295	615	3005	9649

Source: Ministry of Finance and Planning (Directory of Industries 1975)

* Only firms with 10 or more employees and registered were considered.

Key: 1. Agriculture
2. Manufacturing
3. Construction
4. Electricity and Water
5. Commerce
6. Communication
7. Government

2.5.1. AGRICULTURE

Though only four units belong to agriculture - two charcoal dealers and ~~tw~~ two farms with production of milk and meat an additional of 2,350 persons are engaged in agriculture informally. Thus agriculture with an employment of 2,430 active persons constitutes a large sector of 20 percent of Morogoro Urban economy.

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2.5.2 MANUFACTURING

Sixty three units belong to this sector in all. Their sizes vary greatly from 1 to 1,500 employees. The smaller units like shoe makers, tailors and carpenters were not included. But units like garages bankeries saw-mills and maize-mills were included. The tobacco factory is the largest unit with 1,500 employees followed by Railway Workshop with 300 employees. "When the Morogoro Leather Complex is completed its capacity is estimated to employ 2,500 persons" [21]. The sector is comparable with agriculture, considering the number of active persons. With its 1,800 employees, this sector account for 20% of Morogoro's urban employees. From 1967 - 1975 manufacturing increased by 1,283 employees, mainly accounted by the Tabacco Factory which began operation in 1968.

2:5:3 CONSTRUCTION

This sector consists of only three units with 176 employees, National Housing Corporation with 40 employees, Taj Mohammed contractor with 127 employees and Singh Construction with 9 employees. The remaining 1,313 employees were living in town but working outside the urban area, i.e. Tanzania Zambia Highway.

2:5:4 ELECTRICITY AND WATER

This sector consits of three units and altogether 1,046 persons employed. It has increased with 982 persons during the last nine years. The main employer being the Ministry of Water, Energy and Minerals.

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2:5:5 COMMERCE

This sector has always played an important role in the economy of the town. In 1970 it represented 4.8% of the total earnings in the town.

As the Regional Headquarters, Morogoro town serves as the commercial and administration centre of the entire region. Most of Government departments and Parastatal organizations are represented in Morogoro.

2:5:6 EARNINGS

The table below represents, the earnings which accrued in Morogoro town in 1970.

TABLE NO.3 EARNINGS BY INDUSTRIAL GROUPS(1970)

INDUSTRIAL GROUPINGS	WAGE BILLS MILLIONS SHS.	PERCENTAGE
Agriculture	2.4	8.5
Mining & Quarrying	0.1	0.5
Manufacturing	4.9	17.0
Public Utilities	1.5	5.2
Construction	1.6	5.5
Commerce	1.4	4.8
Transportation	3.8	13.2
Finance	0.4	1.6
Services	12.6	43.7
	28.8	100.0

Source: Morogoro Master Plan 1974

2.6 UTILITIES AND SERVICES:

.../30

2:6:1 DRAINAGE AND SEWAGE

Storm water drainage in the town consists of small open drains which are inadequate; most roads are eroded during rains due to the heavy run off from the surrounding hills and the generally high water table in the town.

A few streets in the town have recently been provided with adequate storm water drains.

There is no water-borne sewage system or sewage treatment plant.

2:6:2 WATER SUPPLY

Morogoro Township gets its water supply from Morogoro River which is claimed and treated at the foot of the Uluguru Mountain near the source.

The water is received into two reservoirs of 250,000 gallons respectively and gravitates without the use of pumps into two other storage tanks of 40,000 gallons each.

The present consumption is estimated at about one million gallons per day and the present storage facilities are, therefore, inadequate. There is a proposal to supplement supply with two other bore-holes.

The inadequacy of storage facilities is particularly felt during the dry season when the run-off from the the river decreases.

During the rains the water is usually contaminated near the source. The only treatment at the moment is by chlorine and a sedimentation tank of only 60,000 gallons capacity.

The water from the hills is also said to have quite a high mica content.

.../31

2:6:3 POWER SUPPLY

Morogoro Town was formerly supplied from a 33 KV transmitter also serving Kilosa and Kimaba and their surrounding sisal Estates.

This has recently been supplemented by a 132 KV system. Most of the town and the immediate surroundings are supplied or can be supplied with power.

The average present consumption is about 2,092 units per day, the principal consumers being the institutions and industries.

The present demand is well within capacity and will suffice for about the next five years, after which, it might be necessary to receive supply from the new power project at Kidatu.

2:6:4 GARBAGE DISPOSAL

The Town Sub-District operates a refuse disposal service throughout the town. The bulk of this is dumped North of the town in a former gravel pit.

2.7 TRANSPORT AND COMMUNICATION

3:7:1 Roads Network:

The external road-links to Morogoro town consist of Dar-es-Salaam, Iringa Road, now part of the Tanzania Zambia Highway and Dodoma-Korogwe Road. Both are National highways.

The Tanzania Zambia Highway by-passes the town centre at a distance of two kilometres thus removing a lot of the heavy through traffic from the town centre.

The previous length passing through the town has however, been retained as an internal distributor.

.../32

The Boma and Kingalu Roads serve as collectors for the low density residential area in the south and the Mzimbo street for the new residential area North-West of the town.

The service roads take-off from the major distributors and are of varying standards and qualities. Most of the roads near the town centre and in the town centre and in the low density residential areas are tarmaced roads and reasonably maintained but the rest of the service roads, particularly those in the high density areas are of rather poor quality but are being gradually up-graded to gravel standards.

2:7:2 Railway

Morogoro is served by the Central Line linking it directly to Dar-es-Salaam and the regions of Dodoma, Tabora, Mwanza and Kigoma, and easy inter-changes to the other railway lines at Tabora and Ruvu. There is a daily rail service between Dar-es-Salaam and Morogoro.

2:7:3 Air Service

There is no regular air service to Morogoro at the moment. This might be due to its nearness to Dar-es-Salaam which is about 145 kilometres. There is an air-strip North of the town with landing facilities for light aircrafts.

2:8 LAND USE

2:8:1 Residential Area:

Residential areas in Morogoro Urban are classified into four categories, namely, low, medium and high density areas and the squatter areas (unplanned settlement).

The existing residential areas have been sub-divided into units or blocks.

.../33

The low density areas (up to 50 persons per hectare gross) located southwards of the town consists mainly of sub-urban type Government quarters developed during the colonial days at densities of about two units per hectare and a few more recent additions by the National Housing Corporation and private development.

The medium density ares 51 - 100 persons per hectare gross mainly located in and around the central areas consists mainly of flats built over shops and offices.

The remainder of the planned residential districts are of high density development (above 100 persons per hectare gross) of traditional building types which are gradually being modernized. These have average plot sizes of 375 s square metres or 4,000 square feet, and are mainly single storey six roomed houses with outbuildings for services located at the back.

More recent development in these area consists of National Housing Corporation Tenant-Purchase and low cost housing schemes also built in the traditional styles but with more durable materials and better workmanship.

There are three main unplanned settlements within the urban, namely Mwembe, Songo and Msamvu, areas located along Korogwe-Tanga Road and expanding North-west towards the new by-pass; The Kichangani area located North East of the railway station; and those occupying part of the Mission Land which is presently outside the township boundaries.

The total housing stock in Morogoro at the latest count is estimated at 6,200 of which about 34 percent are unplanned settlement dwellings.

.../34

They have been classified as good, fair and poor, good representing those with a life expectancy of up to 20 years if rehabilitated or modernised, and poor representing those built of temporary or semi-temporary materials and those incapable of rehabilitation and vitually unfit for human habitation. 37 percent of the dwellings are considered to be in good structural conditions, 24 percent fair and 39 percent poor.

Table No.4 Housing Conditions*

TYPE	TOTAL	%
Good	2,335	37.3
Fair	1,512	24,1
Poor	2,425	38.6
TOTAL	6,272	100

*Excluding 1,500 unplanned settlement houses.

Source: Morogoro Master Plan, 1974.

The above figures demostrate the seriousness of the housing situation in Morogoro. There is an acute shortage resulting in extensive overcrowding, particularly in high density areas: Houses designed for one family occupation are usually shared by several families with occupancy rates of up to three persons per room (1 person per room is considered ideal) and many dwellings lack basic facilities particularly in the squatter areas.

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2:8:2 THE TOWN CENTRE (C B D)

The town centre of Morogor is quite a distended area and difficult to define. The entire area comprising part of Dar-es-Salaam Road within the Township and extending to the end of Madaraka Road including the adjacent side streets on both parts of the road has been demarcated for detailed study.

This is the centre of the town containing its main commercial, administrative and entertainment buildings. The orientation of the centre and in fact the entire town is based on this central axis from which otherroads take off. The focus of the town is the roundabout connecting Dar-es-Salaam Road and Madaraka Road from the East and West and Lumumba Street and Boma Road form the North and South respectively. The main business district is situated around this junction and has a complex of buildings of both historic and architectural interest. Further down along Dar-es-Salaam Road are located the major public institutions and offices and places of entertainment. The side streets off the central am main road have more mixed uses comprising mainly of a combination of commercial and residential uses mixed with some light service industries.

2:8:3 INDUSTRIAL AREAS

Apart from the scattered service industrial premises in the central and residential areas, which will be covered in the next chapter, the only major industrial area is located North of the town along Mazimbo street flanking both sides of the railway line.

.../36

The industrial uses here comprises the oil storage premises of various petroleum companies, Morogoro Leather Complex, the comworks heavy plants service yards, the abattoir, A Tanzania Tobacco Processing Plant and several other small establishments.

A diesel service yard for the East African Railways has been reserved near the railway station.

The table below summarize the land use pattern of the town.

Table No.5 Existing Land Use Pattern

LAND USE	HECTARES	PERCENTAGE
Residential	786.90	52.80
Commercial	14.11	0.95
Industrial	87.00	5.82
Public Buildings	71.57	4.98
Open Spaces	48.50	2.93
Transportation	286.60	19.22
Cemetries	3.32	0.23
Vacant Land	237.00	13.07
TOTAL	1,535.00	100.00

Source: Morogoro Master Plan, 1974.

2:9 SQUATTER SETTLEMENTS POLICY

Since the study includes the squatter (unplanned) settlements, there is a need to understand the Government attitude towards these settlements. The Government Policy is found in a paper presented by the Ministry of Lands, Housing and Urban Development 1972. The paper states that:

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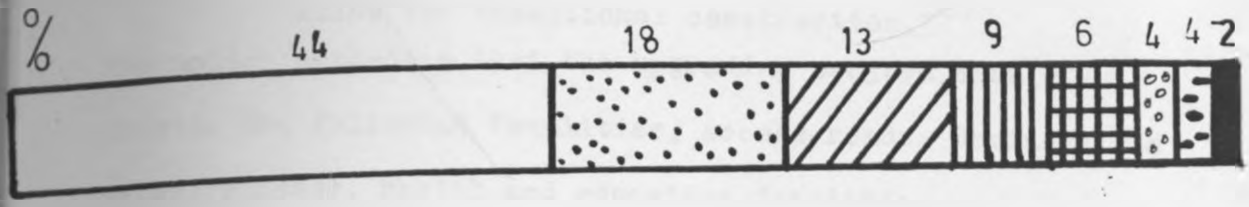
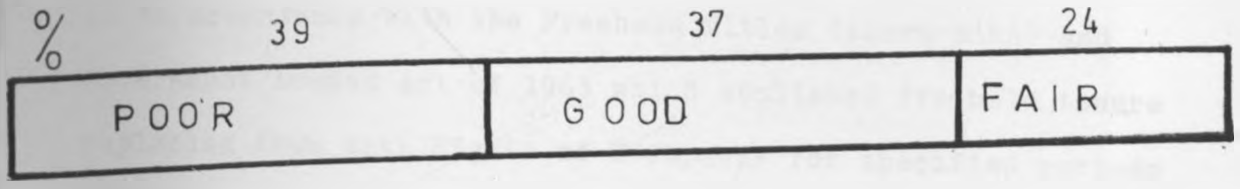
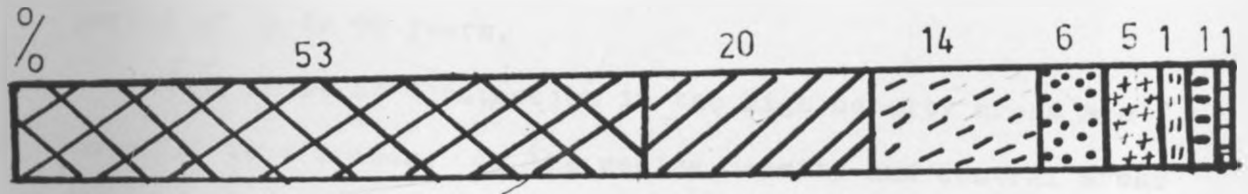
Earnings By Industrial Groups 1970. ③



Housing Conditions 1974. ④



Existing Land Use Pattern 1974. ⑤



KEY

- Services
- Finance
- Industrial
- Residential
- Transportation
- Vacant Land
- Agricultural
- Public Building
- Construction
- Open Space
- Public Utilities
- Cemetries
- Commercial

"Squatter areas are to be accepted and improved, by-laws to be amended to allow for traditional construction."[22]

The policy emphasize that the upgrading program should provide the following facilities, access roads, drainage and water, schools, health and education facilities.

2:10 LAND TENURE

Land tenure in Morogoro like in the rest of the country is in accordance with the Freehold Titles (conversion) and Government Leases Act of 1963 which abolished freehold tenure replacing them with Rights of Occupancy for specified periods of time.

There are two types of leases namely, short term leases for periods of less than 5 years and long term leases for period of up to 99 years.

Most Right of Occupancies in the high density areas are on short term leases. In the medium density and central areas leases have, however, been terminated due to the unwillingness of owners to redevelop in accordance with the planning proposals and some have been acquired through the Acquisition of Buildings Act 1971. Virtually all the land in the low density area is in Government ownership, including a large part of the Government Offices are located.

There are also the unplanned settlements, located in thre three main areas within the town who have no legal tenure but are held in accordance to quasi-customery land tenure. There are sisal estates located at the outskirts of the town on agricultural leases.

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MOROGORO URBAN

Land Use

1977

- Residential
- Commercial
- Industrial
- Public Building
- Open Space
- Railway Sheds
- Agriculture
- Vacant Land
- Rivers
- Roads
- Railway
- Town boundary
- Contours (m)

By M Mghwera
Planning Dept
June 1977

No 4

N

2:11 CONCLUSION

The general planning problems facing the town can be summarized as follows:

(i) The present population of Morogoro urban is estimated at 50,000 and the existing housing stock at the latest count is estimated at 7,200. At an average occupancy rate of 5 persons per unit the current housing demand should be in the region of 10,000 units. This shows an absolute current deficiency of about 2,800 units.

(ii) From 1967 - 1975 the employment sector increased by 2,318 persons. The annual employment inccrease is, therefore, about 489 persons. In the same period population increased by 25,000 that is an annual increase of 3,000 people in the town. Employment ratio in this 1:6. It can be concluded that employment growth is very low.

(iii) The town has about 1,500 houses within the unplanned settlement. These houses are hardly served with public facilities and other urban infrastructures. However, the National Sites and Site and Services Phase II has included these settlements in their programmes.

(iv) The town is faced with general water problems at the moment, however, plans are underway between the Government and the World Bank to provide sufficient water for the town.

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CHAPTER THREE

SURVEY ANALYSIS

3:1 I N T R O D U C T I O N:

The chapter highlights the existing conditions for small scale industries in the low income housing communities, it includes, ownership, types of firms, location, site, infrastructure, capital inputs, marketing organization and earnings, comparative analysis of small scale and large industries and socio-economic characteristics of the household.

Accordingly a survey was carried out in the following low income housing communities in Morogoro Urban; South West of the Railway, Msamvu and Kichangani, (see attached maps), with a view to obtain as much of this information as possible.

3:2 SMALL SCALE INDUSTRIES:

3:2:1 Ownership of the Firms:

It was identified in the survey that four major ownership groups were involved. The table No.6 presents the findings.

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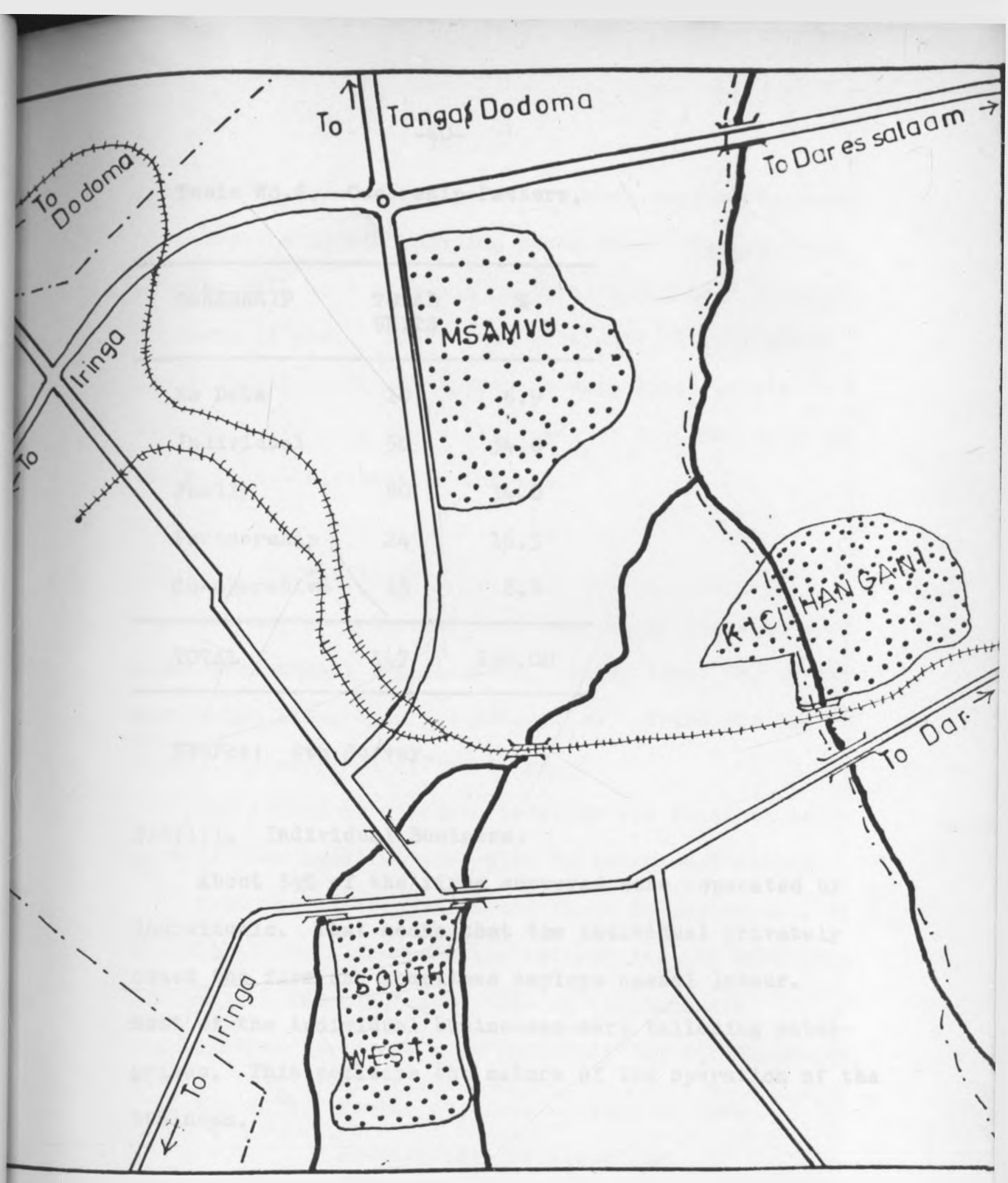

PLANNING AREAS

MOROGORO URBAN

Scale:

0 500 1500 miles

0 250 600 km

5

N

By S. M. Mghweno

Department Of Planning

June, 1977.

Table No.6. Ownership Pattern.

OWNERSHIP	TOTAL UNITS	%
No Data	10	6.9
Individual	50	34.0
Family	50	34.0
Partnership	24	16.3
Co-operative	13	8.8
TOTAL	147	100.00

Source: Own Survey.

3:2:1:1, Individual Business:

About 34% of the firms surveyed were operated by individuals. That means that the individual privately owned the firm and sometimes employs casual labour. Most of the individual businesses were tailoring enterprises. This reflects the nature of the operation of the business.

3:2:1:2, Family Business:

Another 34% of the firms were owned and organized on family basis, extended family, father and sons or brother and brother enterprises.

There was a general acceptance among thepeople interviewed that family organized enterprises afford a degree of trust among them and of course some skills are

.../41

transmitted from father to son in such family business.

Instead of discouraging these family business the planner will have to build on them rather than attempt to bread it down. Apart from providing cohensiveness the informal system of apprenticeship which exists depends heavily on the willingness of the craftsmen to train their relatives or friends.

3:2:1:3, Partnership:

The survey indicated that only 6% of the firm were under partnership organization. Under this, two or more people had a share in the enterprise. There was no formal registration of the firms.

The method of dividing proceeds was found to be more or less equally, according to individual output.

From the survey 75% of the firms un partnership accepted to join co-operative enterprises, if ways were available. They indicated that on co-operative organization there are more opportunities for expansion.

Table No.7, Number of firms willing to form co-operative organization.

.../42

OWNERSHIP	NO. OF FIRMS	WILLING TO FORM CO-OPERATIVE	%
No Data	10	-	-
Individual	50	35	70
Family	50	15	30
Partnership	24	19	79
Co-operative	13	10	76.9
TOTAL	147	79	53.7

Source: Own Survey.

3:2:1:4, Co-operative:

Under co-operative enterprises all the employees have a share in the firm and nobody can participate before buying a share in the enterprise. The limited liability principle applies to such a firm. The survey showed that 17% of the firms were co-operatives but unregistered. The firms showed willingness to register in the near future.

Mostly each member of the group works independently in the workshop, his remuneration depending on his own output and that no sophisticated own-output profit-sharing arrangement is used. About 77 percent of the firms under co-operative enterprises showed their willingness to continue to operate under such organization.

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3:2:2, Type of Firms:

In order to simplify the analysis the 17 types of firms identified were grouped in seven main industrial grouping, but the number of the units surveyed were 147. The table below presents them.

Table No.8, Existing Small Scale Industries

TYPE OF INDUSTRY	TYPE OF UNITS	TOTAL
1. Woodworking	1. Carpentery	24
	2. Photo Frames	6
2. Construction	3. Construction	8
3. Leather Work	4. Cobblers	10
	5. Leather Goods	17
4. Cloth	6. Weaving	6
	7. Tailoring	12
	8. Knitting	9
5. Metalwork	9. Sheet	14
	10. Tinsmith	15
	11. Plumbers	2
6. Repairs	12. Bicycle	5
	13. Motor	6
	14. Radio	4
	15. Watch	3
7. Others	16. Pottery	5
	17. Bakery	1
TOTAL		147

Source: Own Survey.

.../44

3:2:3, The Location and Site of the Firms:

3:2:3:1, Introduction:

These establishments were located haphazardily within the residential community. The sites were determined by several factors. The survey managed to identify the following factors:

Table No.9, Location and Site Structure.

LOCATION AND SITE STRUCTURE	UNPLANNED	PLANNED	TOTAL	%
1. Workshop	47	4	53	36.0
2. Backyard & Verandahs	34	10	44	29.9
3. Temporary Shed	28	9	37	25.1
4. Open Ground	5	8	13	8.8
TOTAL	114	31	147	99.8
PERCENTAGE	78.7	21.1		

Source: Own Survey.

3:2:3:2:, Residential Units:

The availability of space witin the residential units, especially in the backyards and verandahs. The socio-economic implications of this were, the need to reduce the double rentif the ₱ firm moved to another unit; and to maintain the socio-economic cohesion of the home where everybody in the family was involved in the operation.

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About 30% of the firms surveyed were operated on back-yards and verandahs of the residential units.

3:2:3:3, Vacant Open Space:

The availability of vacant space within the residential community. These vacant spaces were either due to; undeveloped plots, or unfit for building, or playing ground, or parking space. The reason for such use is the lack of planned area for small scale industries during the planning stages.

In these open spaces simple structure were built up from sacks and poles or mere tree shade and industries like woodwork, repairs and metalwork were common. The survey indicated that 8.8% of the firms were located on the open space sites within the residential community. These sites were strategically placed on the main foot-path sideway and the firms were very "mobile".

3:2:3:4, Nature of Firms:

The nature of work determined the type of the the site. Some of the metalwork, woodwork and construction were placed at a distance from the residential units. The survey showed that this was due to noise and lack of ~~si~~ disposal facilities during production in the residential units.

3:2:3:5, Working Hours:

The working hours in some of these firms were only

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part-time especially evening hours. Examples of these were; watch and radio repairs, tailoring and leather-work. Such working hours were encouraged only when the firm was within a short distance from the house. About 14.4% of the total labour were part-time workers.

3:2:3:6, Utilities and Services:

The availability of certain utilities such as water, electricity, roads and garbage disposal encouraged the establishment of the firm on site, however, these utilities were planned for other purposes. This was very often in the planned area South-West of the Railway Station. The table below presents the situation.

Table No.10, The existing Infrastructure.

INFRASTRUCTURE	WITH (firms)	WITHOUT (firms)
1. Garbage	30	117
2. Access Roads	107	40
3. Water	90	57
4. Radio/Newspapaers	109	38
5. Electricity	45	102
6. Ext. Services	-	147
7. Marketing	-	147
8. Financial Inst.	-	147
9. Industrial Site	-	147

Source: Own Survey.

.../47

3:2:3:7, Market:

Some of these firms were located in these communities to tap the market. The market issue was very sensitive as table No.11, indicates that 66.6% of the goods produced by small scale industries were sold within the community.

From the survey it was found that the planner may have to reallocate land in the same community, if he is suggesting improvement of the community environment because most of the firm showed reluctance to move from their present location.

3:2:4, Infrastructure:

The infrastructure in this respect consists of projects and services that increase the productivity of a given amount of labour and, other factors being equal, increase the rate of investible surplus. Infrastructure was divided into several sub-headings, see table No.10.

3:2:4:1, Utilities and Services:

The main public facilities found in the area of study were, water supply, garbage and access roads. About 50% of the firms were supplied with water, 75% were accessible by a vehicle. However, in the unplanned settlement the roads were very temporary and it was learned that during the rainy season it was very difficult to drive through, while in the planned settlement no such problem was recorded. Only 30% of the firms

.../48

had garbage disposal facilities and these were owned by the firm.

3:2:4:2, Transportation:

The modes of transportation used by the firm were identified to be, head, motor cars, carts railway, bus and bicycles. Carts and bicycles account for 50% of the present modes of transport used. The most important problem identified was that of transportation of raw materials to the firm. This is an obvious case because about 50% of produce is sold at or around the site. The table No.11, below presents the modes of transportion for all the firms.

Table No.11, Modes of Transportation Used.

TYPE	NO. OF UNITS	%
1. Head	5	3.4
2. Sold on Site	51	34.7
3. Bicycle	14	9.5
4. Cart	40	27.2
5. Tax	2	1.4
6. Railway & Bus	10	6.8
7. No Data	25	17.0
TOTAL	147	100.0

Source: Own Survey.

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3:2:4:3, Marketing:

The survey indicated that there was no organization involved in the collection and distribution of the produce from these 147 units. The marketing operation was carried out by the unit as part of the production process.

3:2:4:4, Financial Institutions:

Although the owners of the units admitted to have heard about the National Bank Of Commerce and other banks none of them had tried to ask for credit. This does reflect the emphasis of the National Policy that only help such as credit from the national institutions should be geared to co-operative enterprises,. From this survey it was identified that most of these units were either owned by individuals or unregistered organizations.

3:2:4:5, Land Development:

Land Development refers to Industrial Sites and Services Schemes. The survey showed that none of the firms had such related facilities. Any service on the site e.g. water was not planned for such purposes. However, most of the units indicated their willingness to pay for such site facilities, provided they are within their reach.

3:2:4:6, Extension Services:

There were no services provided to these units surveyed. The small Industry Regional Office provides services to registered units only and to Ujamaa Villages.

Infrastructure for these units is very minimal, furture plans would be needed to specify the need for such economic activity in the community, because their existence affects the provision ofsuch services as water, garbage disposal, electricity and parking.

3:2:5, Capital Inputs:

Capital refers to the equipments and the buildings of the unit. The survey identified that most of the initial capital was obtained in several ways.

Table No.12, Source of Capital.

FIRMS	INHERITED	HIRED	SAVING	NO DATA	TOTAL
1. Woodwork	6	9	7	8	30
2. Construction		4	1	3	8
3. Leatherwork	10	4	15	4	33
4. Cloth	8	3	10		21
5. Metal	12	1	16	2	31
6. Repairs	9	1	8		18
7. Other		3	2	1	6
TOTAL	45	25	59	18	147
PERCENTAGE	30.6	17.0	40.0	12.2	99.8

Source: Own Survey.

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About 30% of the units obtained their equipments and building from parents and relatives through inheritance.

By saving it refers to incomes generated by other sources of income, then invested in small scale industry business. The survey indicated that 40% of the existing capital was from their savings.

About 17% of the capital was under hiring or ~~reutin~~ renting procedure. The firm pay certain amount of money at the end of the month.

These sources of capital are the bases of household saving, such savings can hardly be mobilized for other development without full participation of the owner.

3:2:5:1, Equipment:

Below is the summary of themain equipment in possession by the units surveyed.

(i) Woodworking: Planes, saw, clamps, drills, vice, hammers, chisels, filifili, scissors, drake, brace, bending machins, electric randah, electric saw, electric drill, and roughing file.

(ii) Metalworking and Repairs: Hammers, big scissors, punch, pliers, vice, welding rods, joining machine, machine for making small refrigerator repairs, bellow, welding machine and curving machine.

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(iii) Leatherworking: Cutting knives, lasting pieces, sharpening stones, cobbler hammers, nail cutter, tripod stands, revolving punckers, cobbler needles with handles, roygbing file, scissors, nail remover, singer needles and lasts for men and women.

(iv) Cloth: Sewing machine, scissors, measuring tape, and needles.

3:2:5:1, Value of Equipment:

There was no reluctancy by the units to disclose the various tools and other equipment which they possessed and these were in any case readily observable. The information collected on the value of these equipment are, therefore, accurate.

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Table No.13, Value of Capital Equipment by Firms.

VALUE	FIRMS								
	1	2	3	4	5	6	7	TOTAL	%
No Data	6		10	7	12	4	2	41	21.8
500 - 1,500	3		6			4	3	16	10.8
1,501 - 2,500	2		5		7	1		15	10.2
2,501 - 3,500	6	2	4	9	3	4		28	19.0
3,501 - 4,500	1	3	1	4	5	3	1	18	12.2
4,501 - 5,500	7		4	1	1			13	8.8
5,501 - 6,500	1	1	1					3	2.0
6,501 - 7,500	1	1			2			4	2.7
7,501 - 8,500	3	1	1		2			9	6.1
TOTAL	30	8	33	21	32	18	6	147	99.9

Source: Own Survey.

Key:
1. Woodwork
2. Construction
3. Leatherwork
4. Cloth
5. Metalwork
6. Repairs
7. Others

The table above indicates that the value of these equipment range between 1,500 to 7,500 Tanzania shillings.

The main problem indicated by all the firms was lack of repairing facilities of their equipments.

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3:2:6, Source of Raw Materials:

The main raw materials used by these 147 units were, wood, bensol, softwood, iron bars, iron sheets, scrup iron, motor vehicle parts, textile materials, leather, threads, gluing-henkel etc.

An enquiry was also carried on, to identify the source of the raw materials. Table No.14, presents the results of the survey, also the attached map.

Table No., 14. Source of Raw Materials by firms.

FIRMS	WITHIN THE URBAN	MOROGORO REGION	OUTSIDE THE REGION	NO DATA	TOTAL
1. Woodwork	5	15	4	6	30
2. Construction	2	2	4		8
3. Leatherwork	12	7	10	4	33
4. Cloth	10	2	6	3	21
5. Metalwork	15		12	4	31
6. Repairs	5	6	7		18
7. Others	1	3	1	1	6
TOTAL	50	35	44	18	147
PERCENTAGE	34.0	23.8	29.9	12.3	100

Source: Own Survey.

About 50% of the raw materials were obtained locally within the urban area, most of these were equipments for repairs, while 35% of the raw materials were obtained from the four districts of the region excluding Morogoro

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Urban. The main raw materials were timber and timber products.

Some of the materials come from Moshi, Tanga, Dar-es-Salaam, Tabora and even abroad. These were metal-sheet, leather, cloth, cement, gluing etc. The attached map presents this. These materials accounted for about 44% of the total raw material required by the firms surveyed.

3:2:6:1, Value of Raw Materials:

The table below presents the value of raw materials purchased weekly. The value range from 200 to 1,501 Tanzania shillings.

Table No.15, Average Value of Materials Purchased by the firms weekly.

VALUE	FIRM							
	1	2	3	4	5	6	7	TOTAL
No Data	25	5	20		16	9	5	80
1 - 200			2	10	7		1	20
201 - 300	1		6	3	4	1		15
301 - 500	1	2	4	4		4		15
501 - 800	1			4	3	3		11
801 - 1,500	2	1			1	1		5
1,501 +			1					1
TOTAL	30	8	33	21	31	18	6	147

Source: Own Survey.

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Key: 1. Woodwork
2. Construction
3. Leatherwork
4. Cloth
5. Metalwork
6. Repairs
7. Others

3:2:7, Labour Input:

For planning purposes it is necessary to know the residential place of the labour force within the urban area, experience, total employement, skills and sex distribution in the activity.

3:2:7:1, Place of Residency:

About 75% of the labour force were members of the same community where the firm was operating. While 25% ofthe labour force stayed outside the community. These come everyday to woek in the unit.

Table No.16, Place of Residence within the Urban Area.

FIRM	WITHIN THE COMMUNITY	OUTSIDE THE COMMUNITY	TOTAL
Woodwork	236	172	408
Construction	77	60	137
Leatherwork	242	109	351
Cloth	209	99	308
Metalwoek	98	192	391
Repairs	303	45	344
Others	71	35	106
TOTAL	1,300	649	1,949
%	66.7	33.3	100.0

Source: Own Survey.

This contradicts with most of our information but the precondition for the establishment of such firm was the market rather than the source of labour.

3:2:7:2, Years of Operation:

About 60% of the firms had been in operation in the past four years, while 27% were in operation for only two years. In Kichangani, however, some firms were found to be more than ten years old.

Table No.17, Years of Operation of the firms

YEARS OF OPERATIONS	NO. OF FIRMS	%
No Data	21	14.3
1 - 2	40	27.2
3 - 4	10	6.8
5 - 6	16	16.9
7 +	60	40.8
TOTAL	147	100.0

~~3:2:7:3~~, Source: Own Survey.

3:2:7:3, Employment and Skills:

The table below presents the size of the firms in terms of employment. The number of persons ~~employment~~. employed range from 2 to 15 persons per firm.

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The table also present the type of labout force involved in the operation, more than 75% were full-time while 30% less than 30% were part-time and casual labour.

Table No.18, Number of people involved in Small Scale Industries.

FIRM	FULL-TIME	PART-TIME/ CASUAL	TOTAL	%
Woodwork	342	66	408	20.9
Construction	134	3	137	7.0
Leatherwork	323	28	351	18.0
Cloth	233	75	308	15.8
Metalwork	242	49	291	14.9
Repairs	288	60	348	17.9
Others	106	-	106	5.5
TOTAL	1,668	281	1,949	100.0

Source: Own Survey.

The table below contains the distribution of employment on the various types of industries, as well their skills.

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Table No.19, Employment and level of skills per firm.

FIRM	NO. OF FIRMS	TOTAL EMPLOYMENT	NO. OF SKILLED	NO. OF UNSKILLED	PART-TIME/ CASUAL
Woodwork	30	408	302	62	44
Construction	8	137	35	40	62
Leatherwork	33	351	129	115	107
Cloth	21	308	170	26	112
Metalwork	31	291	140	44	101
Repairs	18	348	88	170	90
Others	6	106	21	33	50
TOTAL	147	1,949	891	490	568
PERCENTAGE		100,0	45.8	25.1	29.1

Source: Own Survey.

The woodworkin, metalworking and leatherworking firms were the largest employers, the average per firm being 10 workers. At the time of the survey 281 casual labour were employed.

The distribution of skills at the time of the survey should rather be recorded as 45% skilled and semi-skilled and 25% unskilled. There were no firmly defined system of apprenticeship and training, most of them mergered as partners, therefore, being grouped under the unskilled ~~lane~~ labour.

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3:2:7:4, Sex Distribution:

Table No.20 Employment by Sex.

FIRM	FEMALE	MALE	TOTAL
Woodwork		408	408
Construction		137	137
Leatherwork		351	351
Cloth	204	104	308
Metalwork		291	291
Repairs		348	348
Others	60	46	106
TOTAL	264	1,685	1,949
PERCENTAGE	13.5	86.5	100

Source: Own Survey.

Over 75% of the people employed in the cloth units, 80% in weaving, 100% in pottery and 70% of the bakery were female. As a whole 26.4% of the total employment in the 147 units were female. The male labour force consisted of 86.5% and most of them being in carpenters, constructions, cobblers, tinsmith, plumbers, sheetmetal and repairs.

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3:2:8, Marketing:

Marketing has two aspects the supply of inputs and the disposal of production, the first aspect has already been covered.

Table No.21, Sales from the Firms.

FIRMS	NO DATA	AT THE UNIT	OUTSIDE THE UNIT	TOTAL
Woodwork	4	20	6	30
Construction	1	3	4	8
Leatherwork	3	18	12	33
Cloth	1	15	5	21
Metalwork	4	22	5	31
Repairs	-	18	-	18
Others	-	2	4	6
TOTAL	13	98	36	147
PERCENTAGE	8.8	66.6	24.5	100.0

Source: Own Survey.

About 66.6% of the total sales were done at the unit sites. This was mostly under metalwork, leatherwork, cloth, woodworking, and repairs. While 25% of the sales were done outside the community or unit sites, Most of them were sold at the Town Centre Markets, or along the Tanzania Zambia Highway by hawkers. A hawker in many cases was also involved in the production.

However, most of them admitted the problem of

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competition between the locally produced goods by the large industries and imported products such as ash-trays and furniture.

3:2:9, Average Gross Revenue:

It was attempted to gather information on the earning from the unit, data was obtained for 110 out of the 147 units. Table No.22 presents the findings.

Table No.22, Average Gross Revenue Weekly.

VALUE	1	2	3	4	5	6	7	TOTAL	%
No Data	6	2	10	7	6	4	2	37	25.2
50 - 200	5			1		1		7	4.8
201 - 400	4		14	3	8	10	4	43	29.2
401 - 800	10		6	10	12			38	25.9
801 - 1,200	5	3	3			3		14	9.5
1,201 - 2,000					5			5	3.4
2,001 - 3,000		2						2	1.3
3,001 +		1						1	0.7
TOTAL	30	8	33	21	31	18	6	147	100.0

Source: Own Survey.

Key: 1. Woodwork
2. Construction
3. Leatherwork
4. Cloth
5. Metalwork
6. Repairs
7. Others

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In general there were no account records in the 95% of the units surveyed, so all the information was based on memory, hence a week seemed to be the best time base.

About 50% of the units earned between 200 - 800 shillings per week, while 5% earned more than 1,200 shillings per week.

3:2:10, Level of Earnings:

Table No.23, Level of Earnings by all firms per week

FIRM	NO. OF UNITS	CAPITAL (T.SHS)	RAW MATERIAL (T.SHS.)	OUTPUT T.SHS.	PROFIT LEVEL
Woodwork	30	128,300	5,300	16,600	11,300
Construction	8	43,000	2,000	9,600	7,600
Leatherwork	33	213,000	6,700	14,000	7,300
Cloth	21	55,000	8,100	9,400	1,300
Metalwork	31	88,000	6,500	22,800	16,300
Repairs	18	54,000	6,300	7,600	1,400
Others	6	9,000	200	1,600	1,400
TOTAL	147	590,300	42,300	81,600	46,600

Source: Own Survey.

The average earnings per unit was about 317 T.Shs. per week. The average earning per person being around 32 shillings per week. The earning is, therefore, below the Government urban minimum wage of 380 shillings per month.

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The data, does substantiate the impression of earnings exist between units. This suggests that assistance might be given to some of the less productive units to bring them up nearer to the average level and that greater care might be taken in selecting new activities.

3:2:11, Conclusion:

In conclusion it can be summarised as follows:

1. The main ownership structure for small scale industries were based on individual, family, partnership and co-operative businesses.
2. The factors for locating these small scale industries in the low income housing communities were; availability of space within the residential unit, vacant open space, nature of the firm itself, market and availability of labour.
3. Most of the firms original funds were from the owners previous savings.
4. The main source of raw materials for the firms were from within the region.
5. The average size of persons employed range from 2 to 15 persons per firm. However, the nature of labour force vary from full-time to part-time or temporary employed. The total number of persons employed in the 147 units surveyed was around 1,949 persons.

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6. In terms of earnings, about 50% of the firms earn between 200 - 800 shillings, while 5% of the firms earn 1,200 shillings per week.

7. From urban planning point of view, it was found that the planner may have to reallocate land in the smae community, if he is suggesting improvement because most of the firms showed reluctance to move from their present location.

Table No.24, Firms planning to Move to another area.

PLANNING TO MOVE	NO. OF FIRMS	PERCENTAGE
To Industrial Area	11	7.5
To Town Centre	7	4.8
To Stay Within the Community	92	62.6
No Data	37	25.1
TOTAL	147	100.0

Source: Own Survey.

3:3, A COMPARATIVE ANALYSIS BETWEEN SMALL AND LARGE INDUSTRIES:

The study needs to cover the entire industrial sector if it has to help projecting the future small scale industries. Although, the aim is not to prepare an

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industrial development plan for Morogoro Urban, from the mere fact that the study is dealing with small scale industries, it becomes necessary to know whether the rest of economy will benefit.

A survey of the existing large industries in Morogoro Urban was conducted to obtain the following information:

(i) The existing establishments, their initial capital, employment, location and output.

(ii) Relationship between small and large industries.

(iii) To aid in the proposals for future small scale industries.

3:3:1, Working Definition:

The working definition will be based on the East African Statistical Department. "The Department defines a medium industry as an establishment employing nine to forty-nine persons, while large industry is an establishment employing more than fifty persons" [23]. The large industries in our study will be all those establishment employing more than nine persons and are registered.

The definition for small scale industries remains as before, ..." as an unk unit whose control is within the capabilities of Tanzanian people, individually or collectively in terms of required and know-how and

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includes handicrafts" [24], or it can be small units most of which are usually unregistered and do not appear in an official statistics of industries. At the same time employment conditions are very erratic as compared to large industries.

3:3:2, Type of Industries:

The existing type of industries in the area both small and large have a lot of similarities. Therefore, there is no need ~~n~~ for a detailed breakdown.

Table No.25, Classification of Existing Small Scale Industries.

ISIC CODES	TYPE OF INDUSTRY	UNITS	CAPITAL T.SHS.	NO EMPLOYED	MONTHLY GROSS REV.
3211	Cloth	21	55,000	233	28,600
3231	Leatherwork	33	213,000	323	56,000
3320	Woodwork	30	128,300	342	66,400
3699	Metalwork	31	88,000	242	87,200
	Construction	8	43,000	134	50,400
	Repairs	18	54,000	288	51,200
	Others	6	9,000	106	6,400
TOTAL		147	590,300	1,668	374,800

Source: Own Survey.

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Table No.26, Classification of Existing Large Industries.

ISIC CODES	TYPE OF INDUSTRY	NO. OF ESTABLISH-MENT	CAPITAL T.SHS	NO EMPLOYED	GROSS A. REV. T.SH.
3116	Grain	6	10.8m.	126	6.2m.
3117	Bakery Products	4	215,750	116	7.3m.
3140	Tobacco Products	1	N.A	1,590*	N.A
3211	Weaving & Knitting	2	419,300	37	378,537
3231	Tanary Products	1	155m.	2,000	165m.
3311	Saw Mills	2	26,530	36	99,800
3320	Furniture	2	25,000	31	920,000
3512	Fertilizer & Pesticides	1	55,000	55	2.6m.
3699	Metal	5	102,302	70	338,500
TOTAL		24	166.6m.	2,472	182.8m.

*Excluded in the grand total.

Source: Own Survey.

It can be noted that the kinds of industries established in Morogoro Urban has three basic characteristics:

(i) 'Processing Agricultural products e.g. Tobacco.

(ii) Last stage processing of consumer goods e.g. weaving and knitting.

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(iii) Production of service activity necessities e.g. household goods.

The attached maps show the main source of raw material for both large and small scale industries.

3:3:2, Locational Characteristics:

The interst here is the location of the larger industries within Morogoro Urban rather than on the National Setting. Reference to the attached map presents the location of both medium and larger industries are either in the vicinity of the Central Business District of the town, or in the industrial zone. Industrial zone here refers to a piece of land or a district legally zoned for industrial use. In the previous section it was found that most of the small scale industries were scattered haphazardly in the residential communities.

The reasons for such location for large industries were as follows:

(i) These industries tend to locate in the industrial area because of the zoning regulation.

(ii) These industries also tend to take advantage of existing infrastructure & utilities and services, such as water, electricity, fire protection, roads, and godowns.

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MOROGORO URBAN

Industrial Zones, 1977

Key

- River
- Town Boundary
- Main Road
- Industry
- Railway

0 500 1500 ½ Mile

0 200 600 1 Km

By S. Mghweno
Planning Dept
June 1977

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NC
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(iii) The existence of the East Africa Railway line, as the major transporter of both raw materials and finished products.

(iv) Those in the CBD tend to be located there so as to control or to meet the consumer easily.

However, planning has played a very important role in determining their location.

3:3:3, Ownership and Organization:

In the previous chapter it was found that small scale industries were owned and organized on family basis or on unregistered partnerships or co-operatives. This is not so with the large industrial establishments. The ownership and organization is complex. These are modern organized industries, which implies the use of the lastest machinery and business management techniques. The ownership and organization characteristics can be summarized as follows:

(i) Parastatals: These areindustrial establishments owned and organized fully or partly by the Government. In Morogoro Urban the parastatal industries are fully owned by the Government. These were National Milling Corporation, Tanzania Tobacco Processing Company Ltd. and Morogoro Leather Complex.

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(ii) Co-operative and Ujamaa: These are registered industrial establishments owned and organized on co-operative and on Ujamaa principles. All the employees have equal share in the firm. The Limited Liability principal apply to such an establishment. Example of these were, Sekulu Tailors: and Uluguru Tailors Co-operative Society Ltd.

(iii) Private Individuals: These are also registered industrial establishment owned and controlled fully privately either on family basis or on partnerships. Example of these were; N.J. Ebrahim Ltd. and Pitambu Ramshi and Sons Ltd.

About 60% of the labour force were employed in the three large parastatal industrial establishment. This indicates the magnitude of parastatal companies the control of the urban economy.

3:3:4, Performance:

The few large industries that have been constructed in the area tend to use relatively capital intensive technologies reducing employment. The capital labour ratios for Morogoro Urban large industries are given below.

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Table No.27, Capital and Output - Labour ratios in the Large Industries *.

INDUSTRY	CAPITAL PER WORKER (T.SHS.)	OUTPUT PER WORKER (ANNUAL) (T.SHS.)
Grain Mill	84,127	4,920
Bakery Products	1,860	6,299
Tobacco Products	N.A	N.A.
Weaving & Knitting	11,332	10,230
Tanary Products	77,500	82,500
Saw Mills	736	27,722
Furniture	806	29,677
Fertilizer & Pesticides	1,000	47,273
Metal	1,461	4,835
TOTAL AVERAGE	6,756	7,399

Source: Own Survey.

* Formula for

(i) Capital Labour - Ratios

$$= \frac{\text{Capital Invested}}{\text{Labour Employed}}$$

(ii) Output Labour - Ratios

$$= \frac{\text{Total Annual Output}}{\text{Total Labour Employed}}$$

The industries using the most capital per worker were Grain Mills, 48,129 (T.Shs.), Tannary, 77,500 (T.Shs.)

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and Weaving and Knitting 11,332, (T.Shs.) " ..... Other significant factors which reflect the high capital labour ratios of African industries these include the high installation costs, the heavy reliance on imported expatriate skills, the high transport costs especially of inland locations, absence of organized commercial machinery within the countries delays and inadvertance, provision of high social overheads (e.g. expatriate housing) excessive use of supplies credit, ignorance at the purchasing and deliberate malpractices ..... The general conclusion is that African industrialization is both capital intensive and capital expensive" [25].

Small Scale Industries in the study area are labour intensive. The fixed investment was in the vicinity of 354 (T.Shs.) per worker in average.

Table No.28, Capital and Output Labour Ratios in Small Scale Industries.

INDUSTRY	CAPITAL PER WORKER (T.SHS.)	OUTPUT PER WORKER (T.SHS.) ANNUAL
Cloth	236	1,472
Leatherwork	659	2,080
Woodwork	375	2,329
Metalwork	363	4,324
Construction	320	4,513
Repairs	187	2,133
Others	48	724
AVERAGE	354	2,696

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Source: Own Survey.

Investment per worker in the large scale industry was over 20 times as great as that in small scale industries. Clearly an activity which makes intensive use of a country's resource and economizes on the scarce factors such as capital equipments, is worthly of close attention and development support.

However, small scale industry is not necessarily less capital - intensive than its large counterparts when considering the quality of its fixed investment and products. It was found in the survey that most of equipment owned by small scale industry were worn-out and old fashioned and production capacity on average was 2,696 (T.Shs.) compared with 7,299 per worker in the large industries per year.

3:3:5, Source of Financial Resource:

In terms of access to finance the large industries seems to be much more fortunate. Historically, Tanzania planners have in the past years concentrated on the large industries, treating the handicrafts and small scale industries as peripheral to their main concerns. Up to 1972 there was very little emphasis on small scale industries in the national or regional plans. Although the role played by Tanzania's small scale industry in the service sector alone is far from peripheral.

The major source for large industrial finance in the area has been through; internal resource~~namely~~ namely

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self-financing and Government funds, and external resource from International Banks and other foreign sources. While for small scale industries much of the resource has benn from local individual financila supports.

In conclusion, a modern industrial sector is not complete and not as effective as it should be unless it has both small and large industries.

3:4, THE HOUSEHOLD SOCIO-ECONOMIC:

It is necessary to establish a basis as to whether small scale industries are viable and accepted by the low income housing community at Morogoro Urban. Therefore, it is hoped to avoid the common approach in most plans which are biased towards the technical and economic aspects of the development and too often neglects the human aspects. This section will investigate the socio-economic characteristic of the household, aiming at:

(i) The earlier section investigated the existing small scale industries. The aim of the study is not only to strengthen the existing industries but to involve more people and even propose new one.

(ii) To study the past and future mobility of the household.

(iii) To investigate some of the socio-economic patterns at the community level, and at the level of the consumer.

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(iv) To assess the financial ability to support small scale industries in the area.

3:4:1, The Household Size:

The average number of household per house was 2.5. The table below presents this.

Table No.29, Number of Households in Each House.

NO. OF HOUSEHOLD	PLANNED SETTLEMENT	UNPLANNED SETTLEMENT	TOTAL
1	25	57	82
2	12	41	53
3	1	4	5
4	4	7	11
5	3	-	3
6	-	8	8
7	5	-	5
8	-	3	3
9+	-	-	-
TOTAL HOUSEHOLD	50	120	170
NO. OF HOUSES	20	50	70
AVERAGE PER HOUSE	2.5	2.4	2.5

Source: Own Survey.

The households in the planned settlements were slightly high. This clarifies the problem of housing highlighted by the Morogoro Master Plan of 1974 and in chapter two.

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3:4:2, Family Structure:

The survey indicated that 41.6% of the household were under the immediate family and the second largest type of household was the single which was about 26.9 percent.

Table No.30, Types of Households.

TYPE	PLANNED SETTLEMENT	UNPLANNED SETTLEMENT	TOTAL	%
Single	12	35	47	26.9
Couple	7	22	29	16.6
Family (immediate)	23	50	73	41.6
Dependants & Others	8	18	26	14.9
TOTAL	50	125	175	100.0

Source: Own Survey.

3:4:3, Migration:

The table below presents the previous residence of the head of the household before coming to Morogoro Urban.

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Table No.31, Previous Residence by Head of Household.

PREVIOUS RESIDENCE	PLANNED SETTLEMENT	UNPLANNED SETTLEMENT	TOTAL	%
Morogoro Urban	5	82	87	49.7
Morogoro Region (Rural)	16	31	47	26.9
Outside Morogoro Region	29	12	41	23.4
	50	125	175	100.0

Source: Own Survey.

The results of the survey indicated the following origins:

(i) About 50% of all heads of the households had been in Morogoro Urban, before urban life took shape. However, most of these were living in the present unplanned settlement. The majority of the heads of the household in the planned settlement came outside Morogoro Region.

(ii) About 26% of all the heads of household were people from Morogoro rural area.

(iii) About 24% of all heads of household came from outside Morogoro Region and were mainly employees.

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The table below presents the length of residence in Morogoro Urban by the head of household.

Table No.32, Length of Residence in Morogoro Urban by the head of Household.

LENGTH OF RESIDENCE (YEARS)	PLANNED SETTLEMENT	UNPLANNED SETTLEMENT	TOTAL	%
Less than One Year	14	26	40	22.9
2 - 3	27	34	61	34.9
4 - 6	1	9	10	5.7
7 - 9	2	15	17	9.7
10+	6	41	47	26.9
TOTAL	50	125	175	100.0

Source: Own Survey.

The findings showed that in the unplanned settlement most of them were there in the past two years, of these 50% have been in the area in thepast six years. In the planned settlement only 25% have been in the area in the past six years. The stability of these people to stay in the area, provide encouragement for the small scale industrial plan in the next chapters.

The main reasons for moving to Morogoro Urban among all the adults is presented below.

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Table No.33, Reasons For Moving to Morogoro Urban all Adults.

REASONS	PLANNED	UNPLANNED	TOTAL	%
To Join Parents and Relatives	14	30	44	8.0
Employment	100	90	190	34.4
Education	24	56	80	14.5
Starting Business	54	79	133	24.1
Non-Migrant	18	87	105	19.0
TOTAL	210	342	552	100.0

Source: Own Survey

The results of the survey can be summarized as follows:

(i) 58.5% of those who were in-migrants had come to Morogoro Urban to look for employment or to start a business.

(ii) 22.5% of the in-migrants came to Morogoro Urban to join families, relatives and for education purposes.

(iii) About 19% of the adults reported living in the present Morogoro Urban for a long-time. They can be referred as urban indigenous dwellers.

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The table below presents the expected future migration patterns.

Table No.34, Future Migration Patterns.

FUTURE MIGRATION	PLANNED SETTLEMENT	UNPLANNED SETTLEMENT	TOTAL	%
To Morogoro Rural	9	15	24	13.7
To Other Regions	12	18	30	17.2
No migration	14	31	45	25.7
No Datal	15	61	76	43.4
TOTAL	50	125	175	100.0

Source: Own Survey.

In the unplanned settlement about 75% showed that they prefer to stay there permanently because they own houses, some business and farms around the urban fringe. This also encourages the establishment of small scale industries. In the planned are only 35% were willing to stay in Morogoro Urban permanently. This is because most of them were Government or Parastatal employees whose transfer is not under their control.

3:4:4, Employment and Income:

Unemployed refers to people (adults) who did not have any remuneration work for the two months previous to the survey.

From the survey it would appear that the majority of adults of households were employed, only 9% were not.

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Although only 9% of the adults of households were unemployed, 47.9% of the population over 14 years old had no permanent employment.

Table No.35, Employment Status of those 14 years old or more.

STATUS	PLANNED SETTLEMENT	UNPLANNED SETTLEMENT	TOTAL	%
Self Employed	15	37	52	9.4
Full-time Employees	54	24	78	14.1
Casual Employees	6	64	70	12.7
Self-Employees (House Duties)	65	79	144	26.1
Unemployed	17	34	51	9.1
Schooling	32	61	93	16.8
No Data	21	43	64	11.6
TOTAL	210	342	552	100.0

Source: Own Survey.

Those without permanent employment could be summarized as:

12.7% Casual Industrial Employees.

9.4% Self-employees.

26.1% Self-employees (houses duties).

If these socio-economic activities were excluded the proportion of total unemployed would be 57.3%.

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This figure shows the seriousness of the employment problem, because most of these sectors are subject to very low and unreliable earnings.

Table No.36, Source of Self - Employment of all adults.

SECTORS	PLANNED SETTLEMENTS	UNPLANNED SETTLEMENT	TOTAL	%
Small Scale Industries	7	18	25	48.1
Agriculture	1	11	12	23.0
Other Business	4	3	7	13.5
No Data	3	5	8	15.4
TOTAL	15	37	52	100.0

Source: Own Survey.

The main sources of self-employment were; 48% small scale industries, 23% agriculture, and 13.5% other business. This presents the importance of small scale industries in the urban economy.

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Table No.37, Education and Unemployment of all adults.

EDUCATION GROUP	MALE	FEMALE	TOTAL	%
No Data	9	5	14	27.5
Illiterate	2	3	5	9.8
Primary	17	12	29	56.9
Secondary	2	1	3	5.8
TOTAL	30	21	51	100.0
%	58.8	41.2	100.0	

Source: Own Survey.

The nature of employment problem is more serious to the primary education level than ~~another~~ any other section of education. Primary education alone consisted about 56.9% of the unemployed.

The monthly income of the heads of household and all other household adults was established as follows:

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Table No.38, Total Monthly Income all household adults.

MONTHLY INCOME (TSHS.)	PLANNED H	PLANNED A	UNPLANNED H	UNPLANNED A	T O T A L H	T O T A L A	TOTAL	%
50 - 300	12	78	52	104	64	182	246	44.6
301 - 399	15	28	39	65	54	93	147	26.6
400 - 499	14	17	11	21	25	38	63	11.4
500 +	5	24	16	10	21	34	55	10.0
No Data	4	13	9	17	11	30	41	7.4
TOTAL	50	160	125	217	175	377	552	100.0

H - Household Head.

A - All Other Adults.

Source: Own Survey.

Over 55% of the household adults received monthly income between 300 - 500 shillings.

3:4:5, Expenditure:

In addition to collecting information on the income of the heads of the household an aggregate income for the household was computed by adding individual earnings to the income derived from other sources, such as agriculture, small scale industries and other business. Each household, also provided their monthly expenditure whereby savings per month was computed.

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Table No.39, Total Monthly Saving by households total income.

MONTHLY SAVING	PLANNED SETTLEMENT	UNPLANNED SETTLEMENT	TOTAL	%
50 - 100	77	101	178	32.3
101 - 200	21	28	49	8.9
201 - 300	34	64	98	17.8
301 +	9	42	51	9.2
No Data	69	107	176	31.8
	210	342	652	100.0

Source: Own Survey.

From the above table it can be concluded that 32% of the adults managed to save between 50 to 100 shillings per month. The difficult part in such calculation came from informal business which seems to have no information on income, expenditure and saving.

3:5, HOUSEHOLD DEMAND FOR SMALL SCALE INDUSTRIAL PRODUCTS:

The survey made an inventory of durable goods possessed by a sample of 175 households in the study area. The things considered were the qualities of each item such as chairs, tables etc.; that the greater number of households possessed, and identi-kit picture of a typical urban low income household was obtained. The survey suggested that urban household in the area owned

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the following goods made by small scale industries:

1. 1 or 2 tables.
2. 2, 3 or 4 chairs.
3. 2 or 6 bedframes.
4. 1 cupboard.
5. 1 large mat.
6. 3 containers.
7. Pots and Pans.
8. Around 9 plates and cups.

Other furnitures, were cushins, shelves and benches, among the household utensils were cutlery, kettles, baskets, basins, stoves , calabashes, trays, bowls, and gourds. Some household also own Jembes (hoes), panga and axes.

Table No.40, Households Demand for small scale industrial products.

INDUSTRY	HIGH	LOW
1. Woodwork	X	
2. Construction	X	
3. Leatherwork		X
4. Cloth		X
5. Metalwork	X	
6. Repairs		X
7. Others		X

Source: Own Survey.

From the survey it can be concluded as follows:

(i) An increase in the general availability and reducing the price of such goods above would mean a much more substantial increase in general economic welfare.

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4. Cloth		X
5. Metalwork	X	
6. Repairs		X
7. Others		X

Source: Own Survey.

From the survey it can be concluded as follows:

(i) An increase in the general availability and reducing the price of such goods above would mean a much more substantial increase in general economic welfare.

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(ii) The rate of establishing household suggest that the possibilities are rather high for furniture, mats, pots, footwears, and the production of assorted metal products such as buckets, kettles, stoves, knives, metal containers, etc.

(iii) The emphasis on woodworking is very much supported from the point of view of need by the large majority of the people with lesser extents tailoring, shoemaking and metalworking, motor-vehicle repairs would not of course show up here as the economic conditions of the household does not allow.

(iv) In examining the kinds of durable goods the majority of households have, as a means of seeing what needs to be produced, it should not exclude the importance of consumer durable goods, the house. The most important of small scale industry in fact might turn out to be construction industry. House construction should be considered an important urban industry. First of all the house is a major ingredient in the standard of living in each and every country. It is clear, secondly that there is great variation in the quality

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of housing between urban communities, which inequalities it should be the goal to even out. Thirdly, the size and quality of the house may condition the demand for other household equipment. The demand for consumer durables will certainly be affected by and correlated with the demand for improved housing. If the rooms are very poor as is possible the incentive to furnish them will be diminished.

3:6. CONCLUSIONS:

In view of the survey, it can be concluded that the most striking features in the area on small scale industries are as follows:

(i) Many of the handicrafts and small scale industries are based on family business and the output is marginal.

(ii) There exists an intermix of land use in the residential area which was not planned for.

(iii) These industries supply the local community with goods and services which are not easily provided by large industries.

(iv) From the social point of view the handicrafts and small scale industries are remunerative,, since it gives employment

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to local people such as housewives, provides simple training and supplies local market with necessary commodities.

(v) The population in the survey area is not very mobile and most of the households earn less than 740 T.Shs. per month.

(vi) Investment per person in the handicraft and small scale industries is low, although capital input per unit produced might be high. Compared to present large industry profit is lower. Small Scale Industry can only survive where large industries are not able to produce economically or where planners have favoured small scale industries.

(vii) We have seen also that there exists a large unknown number of mostly unregistered small scale industries using very simple tools and having very poor premises.

(viii) These industries are also dominated with simple worn-out and out-fashioned tools.

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CHAPTER FOUR

PROBLEM IDENTIFICATION

4:1 I N T R O D U C T I O N:

The previous chapters have given the existing conditions of small scale industries in the study area. This chapter will highlight the main problems of the industries, which can be summarized as follows:

(i) Small Scale Industry;

(ii) The Community and Small Scale Industry;

(iii) Possible causes of the problems;

(iv) The Government Efforts;

(v) Small Industry in other countries;

(vi) Planning Implications;

All these aspects have affected the industries to some extent.

4:2, SMALL SCALE INDUSTRIES:

The main problems faced by small scale industries per sector in our study area, are not unique. These problems appear to be universal to such size of an industry. For example, P.C. Alexander's study in India, Kabagambe's study in Kisumu, UNIDO studies in Europe and Middle East, etc. have mentioned these problems in one way or another. These problems can be summarized as lack of registration, workshop space, working capital, equipment, technology advancement, management, availability of raw materials, marketing and competition.

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They all affect the industry in one way or another.

4:2:1, Lack of Registration:

The Tanzania Central Statistical Bureau has published various forms of information on factory establishments employing ten workers andabove. As a result, no precise and comprehensive statistics are available about the entire small scale industries sector which predominantly consists of less than ten workers. One of the major factors hindering the regular collection of statistics about the entire sector is the non-availability of a complete frame of the small scale industry units function in the country. The main cause is lack of registration of the units, there is very little information available to help in preparation of a plan say Regional Integrated Development Plan.

4:2:2, Workshop Space:

By workshop here it refers to a structure of a building in which the small scale industrial activities are housed. The workshops in the area, were found to be experiencing the following problems:

(i) The workshop was sometimes the living room as such the equipment and the product must be moved every evening to give space for other social activities.

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(ii) The workshops in some areas were very temporary, most of the buildings were built of cardboard or sacks and poles. The equipment and the products were always moved after the days work.

(iii) Some industries were lacking completely working space, as such they either work in the verandahs, or backyards or open ground. They were normally affected seriousily during rains.

All these affect production adversely.

4:2:3, Working Capital:

Most firms operate with insufficient capital. This has affected the firms in two ways. First long delays in implementing development plans which have been on the drawing board for several years; secondly lack of funds to purchase the necessary raw materials. The cause of lack of working capital was a result of lack of registration of the firm because the Regional Authority assistances were unobtainable for unregistered firms.

4:2:4, Equipment:

The industry was persistently using obsolete and worn-out machinery and equipment. This has accounted for low productivity, low quality of products, but high production costs and less profit.

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These firms were also faced with lack of spares which often prevented the industry to be able to satisfy demand at the times it occurred. At the same time lack of repairs and maintenance of equipment was a common problem. The main cause may be due to lack of maintenance unit in the area.

4:2:5, Technology:

Technology is considered to be ....." scientific, engineering, and managerial knowledge, that makes possible the conception development, design, production and distribution of goods and services" [26]. To obtain such technological development a continuous training is necessary. However, two problems appeared to be the most common in the area:

(i) The entrepreneurs were reluctant to share technological know-how and experience. Either lack of trust or unfounded fears keep the local men from discussing or sharing their technological experiences with one another.

(ii) Lack of new ideas the firms practically saw the supply of new techniques of production as not an immediate problem.

Therefore, lack of exchange of ideas have left these firms in a very poor conditions, especially in ~~eel~~ copying with the new models of production.

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4:2:6, Management:

Small-ness in size has its advantages. For one thing these firms were organized and owned on family or on individual or on partnerships basis. The decision making process is less complex and faster than one can think of. These firms can readily react to environmental changes.

But things were not as smooth as they should be, there persisted a very poor costing systems and control. The firms hardly know the cost of production and distribution so as to determine the market price, normally underselling has been experienced by most firms.

4:2:7, Availability of Raw Materials:

The supply of raw materials such as scrap iron, leather, cloth, cement, etc., has been unstable, in sufficient and of low quality. At the same time the supplier has been charging a tremendousily high price for the raw materials. This has caused some firms to close up for months and operating only when the material were cheaply available. In some cases customers were sometimes told to bring the material themselves.

4:2:8, Competition:

For a firm to get hold of a share of the market even with a slim margin or even at a loss, a it was usually resorting to cut throat pricing among themselves. In the long-run, the practice instead of helping the

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small firms tend to destroy them. In case of large firms and importation of goods competition has been serious e.g.importation of plastic goods and manufacturing of metal goods.

To keep on the operation most of the small firms have been undersellings their products. The main cause of such competition is lack of co-ordination and marketing knowledge amon the industrialists.

4:2:9, Marketing:

By marketing it means the process of the supply of inputs and disposal of production. However, things were not working smooth for the small scale industries in Morogoro Urban. These industries were subjected to competition, lack of consumer's knowledge, and lack of transportation facilities. Due to this some goods have been left in the store for months because the producer failed to estimate the quantity or quality effectively demanded.

Small scale industries in the low income housing communities, in Morogoro Urban which face such problems, require proper planning to make them more productive.

4:3, COMMUNITY AND SMALL SCALE INDUSTRY:

The small scale industry was only a small part of the community socio-economic activity. For realistic proposals it require to see the small scale industry as part of the community and not the community being part

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of the industry. The existence of the industry of this level is based on the availability of the community labour and markets. The community resource allows their existence but the availability of the community resource has some limits in supporting the industry.

The community and small scale industry problems are land-use, location employment, organization and financial aspects.

4:3:1, Land Use:

Both in the planned and unplanned settlements, the residential community was the main land user. But several socio-economic activities e.g. small scale industries have come up haphazardily in the community. There existence in this environment should be viewed as a result of man in the struggle to earn a living, therefore, their existence present some degree ofacceptability by the community members. For the planner, they should be a resource for future development.

However, these haphazardily location has resulted to mixture of land use, lack of essential facilities and miuse of certain space which were not planned for.

The possible causes of these existing physical factors might have underestimated in the preparation of the residential community layouts.

4:3:2, Location:

The community is full of labour and market for the small scale industrial development but land to locate

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the industry was its biggest problem in its development.

Isard [27], found that land and labour are not as mobile as capital and markets. But from the survey land, labour and markets are not as mobile as capital, it is this relation which has resulted to the existence of industry within the community. It was found that the community labour farce and market characteristics required for the location ofsuch industries within its reach. The labour force or the firms are reluctant to move to the industrial zone, and at the same time land and some environmental conditions does not allow them to be in the community. The problem is, therefore, the community to have available land and to allow the right typeof industries.

4:3:5, Employment:

The community is faced with employment problems, about 47% of her inhabitants are either unemployed or temporarily employed. The employment problem and the struggle to earn a living becomes a potential factor for the community to accept theestablishment of small scale industries in its environment.

Whereas, industry seeks a supply oflabour land and market in the community, the community seeks an increase in employment and income. The problem is to harmonise the two.

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4:3:6, Community Organization:

Unlike its rural counterpart the urban community is far behind in carrying its own community development activity, without involving the governemnt fully. This might be due to the complexity of the urban community but chances are still available to carry their self-help activity like in the rural area.

The urban Wards, exists but their function have been more political than economic, although their functions are supposed to be both. The problem is, therefore, ensuring that the urban wards realize the economic potential within their environment.

TANU Biennial Conference of September, 1971, Resolution No.18, says "The question of small scale industries is very crucial for the development of our country. Therefore, the National Executive Committee appeals to party leaders to play a leading role in persuading, encouraging and supervising these activities. It is the responsibility of party committees, to ensure that small scale industrial activities are given concrete plans" [28]. The Ward Leaders, will have to organize and help these urban communities, to carry these economic activities which are operating within their environment.

3. 4:3:7, Finance:

Community finance is very low. The earning capacity per household is estimated to be 750 T.Shs. per month. Therefore, in terms of supporting the industry

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financially the community requires to save in a very long period. But financial resource is not the only factor required to support the runningof the industry as self-help (voluntary community labour force) could reduce the magnitude of financial problem.

To conclude the community has the following potential resources, labour force, land, technological know-how and the willingness to participate in the development of the industry.

Table No.41, Summary for the Existing Problems.

PROBLEM	INDUSTRIES						
	1	2	3	4	5	6	7
1. Registration	X	X	X	X	X	X	X
2. Capital	X	X	X	0	X	X	X
3. Equipment	X	X	X	0	X	X	0
4. Technology	0	X	0	0	X	X	0
5. Workshop	X	X	X	X	X	X	X
6. Management	X	X	X	X	X	X	X
7. Materials	X	X	X	0	0	0	0
8. Competition	X	0	X	X	0	0	0
9. Marketing	X	X	X	X	0	0	0
10. Location	X	X	X	X	X	X	X
11. Land-Use	X	0	X	X	X	X	X

Source: Own Survey.

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Key: 1. Woodworking.
2. Construction.
3. Leatherworking.
4. Cloth.
5. Metalworking.
6. Repairs.
7. Others.
X. Existing problems.
O. No problem.

However, the community's main problem is land-use conflict or environment conflict between residential and economic activities. The work of a planner will be, therefore, to bring about a harmony between the two aspects.

4:4, POSSIBLE CAUSES OF THE PROBLEM:

The possible causes can be viewed in the three levels, at local (urban), regional ~~and~~ and national levels of planning.

4:4:1, Lack of Comprehensive Urban Development Plan:

From the view point of urban development planning, small scale industrial development is part of a large industrial development plan, the aim of the plan being to set measures to guide industrial location and to provide land and urban infrastructure facilities for industry, which in turn is one of several elements of a comprehensive urban development plan. Other elements of this plan are, a transportation plan, a plan for utilities and services, such as watersupply, sewage disposal and electricity, housing and residential development plans etc. In Morogoro Urban like all parts of the country, each sector is often carried on isolation.

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The Master Plan has always failed to meet these requirements due to lack of relevant information e.g. future employment capacity, type of industries coming in, resource for plan implementation and lastly lack of co-ordination among the developers.

It is only when all these sectors plan for the urban or metropolitan areas are properly intergrated with each other in terms of space relationship and phasing of execution, that the industrial sector will fully benefit from suitable urban facilities. It is the same time the industrial sector will discover the potentiality of small scale industries in the economy.

4:4:2, Lack of Regional Planning:

Urban industrial development in a country like Tanzania depend upon its hinterland or regions for supply of inputs and for themarket ofits output. An industrial development plan is lacking and at the same time the regional comprehensive plan is also lacking, the broader framework of a comprehensive and many programme to implement policïes for decentralization balanced growth of geographical areas or for the development of specific resource regions.

4:4:3, The National Economic Development Plan:

The small scale industries are one of the many elements for the industrial development sector, which form a chapter in the National Economic Development Plan.

But small scale industries has for many years taken as a peripheral in the industrial sector.

To conclude the industrial development plan should, therefore, be considered as sub-system of urban and regional planning and at the same time a sub-system of economic and industrial development planning.

4:5, GOVERNMENT EFFORTS:

The first effort was the creation through an Act of Parliament, a new central organization called Small Industrial Development Organization in short SIDO, an independent parastatal under the Ministry of Industries. The organization began operating on 1st. December, 1973. It absorbed all the function of the National Small Industries Corporation NSIC which failed to carry its function, and turned the National Arts of Tanzania as its subsidiary. "..... recommended the abolition of the NSIC because it had not done any work for the six years ~~done-any-work-for-the-six-yea~~ that it had been in existence" [29].

In the promotion ofsmall scale industry, the work of SIDO has been to provide all the necessary inputs towards the development and sustenance of nationalwide small scale industries. "These inputs might be in form of:

(i) Industrial Estates,

(ii) Training Schemes,

(iii) Marketing Assistance,

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(iv) Provision of equipment and machines,

(v) Provision of technical economic and managerial studies and assistence,

(vi) Establishment of model plants,

(vii) Provision of raw materials,

(viii) Regional Extension Services to channel the above seven inputs deep into the units" [30].

More emphases has been on the provision of Industrial Estates; especially in terms of expenditure.

4:5:1, Industrial Estates:

"SIDO Industrial Estates programme involve the establishment of eleven estates at Dar es Salaam, Songea, Arusha, Moshi, Tanga, Mwanza, Iringa, Tabora, Musoma and Shinyanga" [31].

In case of Dar es Salaam the following information presents some of the salient features of the programme.

PHASE I (21 Units)	
1. Civil Construction	4,240,268 (T.Shs)
2. Electrical Installation	624,416
3. Consultancy and Architects fees	210,092
4. Others	154,000
Total	5,228,776
PHASE II (30 Units)	13,600,000
TOTAL PROJECT	18,828,776

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Source: Tanzania Sites and Services Reports.

4:5:2, Salient Features:

It is very early to access the performance of the programme but some salient features can be seen clearly.

(i) The location of these industrial estates are deep in the indutrial areas. It is difficult for such programme to tap the type of labour and market identified in the low income housing communities.

(ii) The type of industrial estate provided is of high level than most of the capacity of the firms surveyed.

(iii) The Industrial Estates are more expensive than what the people can afford. As it was found that their monthly earning per household was below 750(T.shs).

The programme is of high level and leave a gap between the household industries and the Industrial Estates. It is the aim of the study to try to bridge the gap.

4:6, SMALL INDUSTRY IN VARIOUS CONUNTRIES:

In order to show concretely some of the problems and conditions of small scale industries in our study area, it is better to present some of the experience from other selected countries. It is only a brief summary and not a comprehensive presentation on small

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scale industries in these countries. It is an attempt to offer a preliminary feel for the problem under discussion. In this attempt Japan, India and Kenya have been selected.

4:6:1, Japan:

The Government assistence to small Japanese manufacturers is focused in the Small Enterprise Agency of the Ministry of International Trade and Industry, which is responsible for policy formulation and supervision of programmes. Local city or prefectual governments are responsible for programme execution. The effectiveness of the programmes depends directly on the quality of local government. "Eight regional offices assist in co-ordinating and administering these activities. But the frontline contact of small firm is with the prefectural and city administrations. These local agencies provide managerial and technical guidance, operate special industry institutes, and administer loans for equipment modernization" [32].

Achannel for private industry advice to small scale firms is provided by Small Business Consulting Offices through Regional Chambers of Commerce and Industry.

The program in Japan could be viewed in three phases, the first phase in early 1940's, the Government established a basic framework for policy formulation and supervision of small firms programme above, the second phase in early 1950's development on small scale industries stressed advisory services and expanding

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finance for rapid increase in new modern small plants and the third phase in late 1950's the programmee developed up to date industrial co-ordination.

The present Japanese ~~samll~~ small scale industries employ more than ....." 2,723,667 persons and represents 47 percent of all employment in plants with more than 10 persons" [33].

4:6:2, India:

"India has by all odds the most comprehensive small factory development program ofany newly industrializing country ..... No effort combining so many elements in a simultaneous has been launched in any other economy. Also, a decade of ecperience has by now provided much down-to-earth knowledge about the problems that arise in practical implementation" [34].

The development of small firms is the responsibility of the Development Commissioner of Small Scale Industries, who has oversight of the extension network of Small Industries Service Institutes, (SISI's) and also help in formulating the policies of the National Small Industries Corporation, the program's commercial wing.

The policy for the program states" . It is one of the aim of National Planning to ensure that these facilities (industrial estates) are readily made available to areas which are at present lagging behind industrially or where there is greater need for proving opportunities for employment, provided the location is otherwise suitable. Only by securing a balanced

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and co-ordinated development of the industrial and agricultural economy in each region can the entire country attain higher standards of living" [35]. The execution of the program, the provision of Industrial Estates seemed to be the most important and useful tool.

The objectives of Industrial Estates in India are first to provide factories and other facilities economically, secondly to relieve the congestion and overcrowding in big cities by dispersation of Industrial Estates; thirdly to help the stimulation of industrial development in economically underdeveloped areas, particularly rural areas; and lastly to promote the rapid development of Small Scale Industries.

In evaluating the program, Alexander [36] concludes that the main problems faced during implementation in the First and Second Five Year Plan were, first wrong decisions in locating and planning for industrial estates, secondly lack of integrated development, so as to reach the small firm as an integrated unit; thirdly there was uneconomics in construction which led to, uneconomic use of land, extravagant style of construction and lavish expenditure on common service buildings and lastly, factory building were not planned according to needs of the entrepreneurs.

However, instances like these do not prove the failure of the Industrial Estates Scheme in that country as such, but only the failure of the sponsors to implement the scheme with care and prudence.

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4:6:3, Kenya:

The Kenya Government efforts can be seen in the establishment ofsome institutions through which small scale industries can receive relevant assistence. Like their Tanzania (SIDO) counterpart emphasis has been in rural areas rather than urban. At the same time the provision of Industrial Estates has been the most important tool in the implementation of the programme.

The provision of industrial estates in Kenya started in 1967, by the Government. The programme aimed at providing services to the local entrepreneurs and to support the overall industrial development. In intiating the program, the Kenya Industrial Estates (KIE) organisation was established, as a subsidiary of the Industrial and Commercial Development Co-operation (I.C.D.C.).

The role of Kenya Industrial Estates can be summarized as, first to carry feasibility studies for various small scale industrial projects, and secondly to provide technical, managerial and financial assistence to the small scale industrial entrepreneurs.

Like their Tanzania (SIDO) counterpart in implementing the programme certain urban centres were selected and industrial estates are being constructed. The selected urban centres are Nairobi, Kisumu, Nakuru, Eldoret, and Mombasa. "The first phase of the Nairobi Industrial Estates consists of 25 factory units and was completed in the middle of 1968 at the cost of £460,000. The second phase consist of 27 factory units estimated to cost £530,000" [37].

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According to the program which was supposed to end in 1975, 100 industrial jobs and £4 million shillings were supposed to be KIE's contribution to Kenyan economy.

However, some problems do exists, Kabagambe study in Kisumu concludes that:

(i) Some of the requirements such as working capital and formal educatin were so high that the majority ofpeople would not be recruited.

(ii) The products of the estates are possibly to face competition problem with the informal sector.

He conclude ....." the intension of the programmes are quite sound" [38]; although some weakness can be s seen.

4:6:4, Conclusion:

From the experience obtained in Japan, India, Kenya and Tanzania itself, several things could be concluded.

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Table No.42. Table of comparison between Japan, India, Tanzania and Kenya.

FACTOR	JAPAN	INDIA	TANZANIA	KENYA
1. A Special Developing Agency	X	X	X	X
2. Implementation through Estates		X	X	X
3. Problem in locating the Estate		X	X	
4. Estates expensive beyond the means of majority Entrepreneurs		X	X	X

X - Existing.

(i) The policy formulated for the promotion of small scale industries were sound but most of theproblems were during implementation.

(ii) In each country it seems the most appropriate way of implementation the small scale industrial development was through a special company e.g. SIDO, KIE etc.

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(iii) The Industrial Estates in Tanzania, India and Kenya were more expensive than the entrepreneurs could afford.

(iv) In Kenya the qualification for an entrepreneurs to obtain a unit in the estate seems to be high.

(v) In Tanzania and India the location of the Industrial Estate was one of the major problems which faced the progam.

4:7, PLANNING IMPLICATION:

The problems identified above, could be minimised by adopting several levels of industrial estates. This will, therefore, necessitate a new approach to the planning problem. First it will be to allow the location of certain type of industrial sheds within the urban residential communities and secondly to formulate standards for Tanzania urban small scale industrial location.

4:8, CONCLUSIONS:

The problems identified can be summarised in the following fivepoints:

(i) The problems faced by the small scale industries were; lack of information, poor workshops, lack of working capital, poor management, lack of raw materials lack of exchange of technology, marketing and co-ordination.

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(ii) There were some problems which the community faced by having the industry, these were, land-use, location, employment, organization, financial support.

(iii) The possible causes of such problems might be due to lack of urban and Regional Comprehensive Plans in the area.

(iv) On the attemp to solve these problems, the Tanzania Government has been faced with the problem of location, financial, co-ordination and the low earning of the majority of the prospect entrepreneurs.

(v) And from the experience obtained in the country like India, Japan, and Kenya, the problem seems to be implementation rather than policy.

CHAPTER FIVE

INDUSTRIAL RESOURCE AND RECOMMENDATION

"The basic strategy is one
of the planned convergence
of domestic reource use
and domestic demand" [39].

5:1, I N T R O D U C T I O N:

In view of the existing problems of small scale industries in the low income housing communities, the planning objectives would be, first to find means by which the national policy on Ujamaa and self-reliance can establish a viable socio-economic for the residents, secondly to establish an industrial development hierarchy in relation to location through the use of industrial community centre, neighbourhood Industrial Worksheds and Industrial Estates for Small Scale Industries, thirdly, to link the low income housingwith small scale industries and lastly to identify the potential labour force and organization for small scale industries in the low income housing communities.

The basic strategy to achieve the above objectives, is principally to use the domestic resources to meet domestic demand.

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5:2, INDUSTRIAL RESOURCE:

The industries recommended below are either resource-based or need-based. Interpretation of resource based does not always mean that the origin of the raw or semi-processed materials began in that region, an example is where metalworking materials may only be done within the region, from imported metalsheets either from abroad or in the neighbouring regions. The availability of metal to these metalworkers then is high and the project would be given full credit as a resource based industry.

The need based resource or service industries are directly related to food, shelter and clothing except where industrial needs are considered, for example the need of small supportive industries to facilitate and provide local market for the large industry.

5:2:1, Resource Based Industries:

The resource based industries in our case can also be refered to as agro-based industries. The following are the resource based small scale industries, these are related to, sisal products, fruit and vegetable canning, wood products, fermented beverage, and mattress fibre. At the same time repairing works and the production of household metal goods. The resource based industries could be grouped into, those related to agriculture raew materials and those related to last stage of industrial processing. The attached map presents the source of raw materials.

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5:2:2, Service Based Industries:

The service based industries includes food production agriculture tools, building materials, manufacturing of component parts stationary and cloth. There are related to the three basic needs food, shelter and clothing.

5:2:3, Resource Potential:

The labour force, land, infrastructure, raw materials, demand for products and financial resource, form the basic resource for industrial development. The location, quantity, number of alternative sources, price trends and expectations for inputs, potential problems with procuring in the future annual quantity of each resource are some of the issues to be dealt with in industrial planning. Much of these have already been dealt with in the previous chapters, below is a summary.

5:2:3:1, Labour Force:

The unemployed or temporarily employed consisted of over 47 percent of the adults in the study area. These included housewives, children, dependants, school leavers and those employed in agriculture activities in the urban fringe.

Another form of labour force was the labour already engaged in the operation of small scale activity i.e, industries. As identified in the survey over 1,000 people with ~~differ~~ different level of skills were involved.

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They form a future base for the development of small scale industries.

At the same time the part-time workers during evening hours, form a considerable source for training the less skilled labour force.

5:2:3:2, Infrastructure:

The attached maps present the urban and national infrastructure which affect directly the development of industries in the area.

The urban infrastructure for the area includes, housing, water supply, road networks, transportation facilities and community social facilities.

In case of the national infrastructure the town is served with up-to-date railway and roads to the various source of raw materials. The main roads are Tanzania Zambia Highway, and Dodoma Road. The East Africa Railways connect the town with Dar es Salaam, Tanga, Arusha, Dodoma, Kigoma and Mwanza. Although not linked directly to the Tanzania Zambia Railway line, a major part of the railway lies within the region and it is expented to have a huge development impact on the region which will eventually reflect on the town. The town is supplied with electricity from theNationsl Electricity Grid from Kidatu.

5:2:3:3, Raw Materials:

The raw materials required for industrial purposes are

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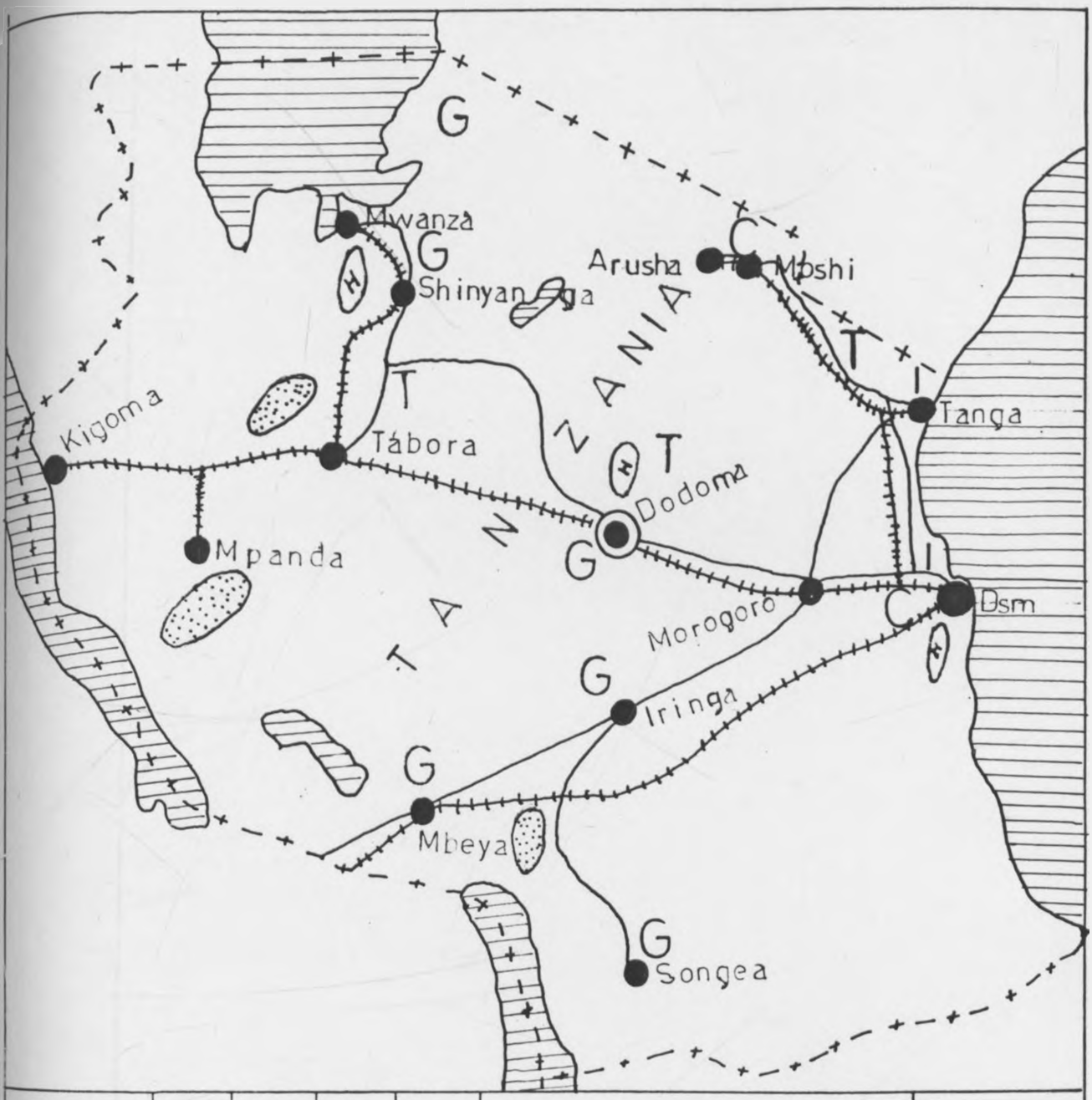

Morogoro Urban : Source Of Industrial Materials

Railway
Road
Tobacco
H Hides
T Timber
G Grains
C Chemicals
I Iron

By S M Mghweno
Planning Dept.
Nairobi University
June 1977

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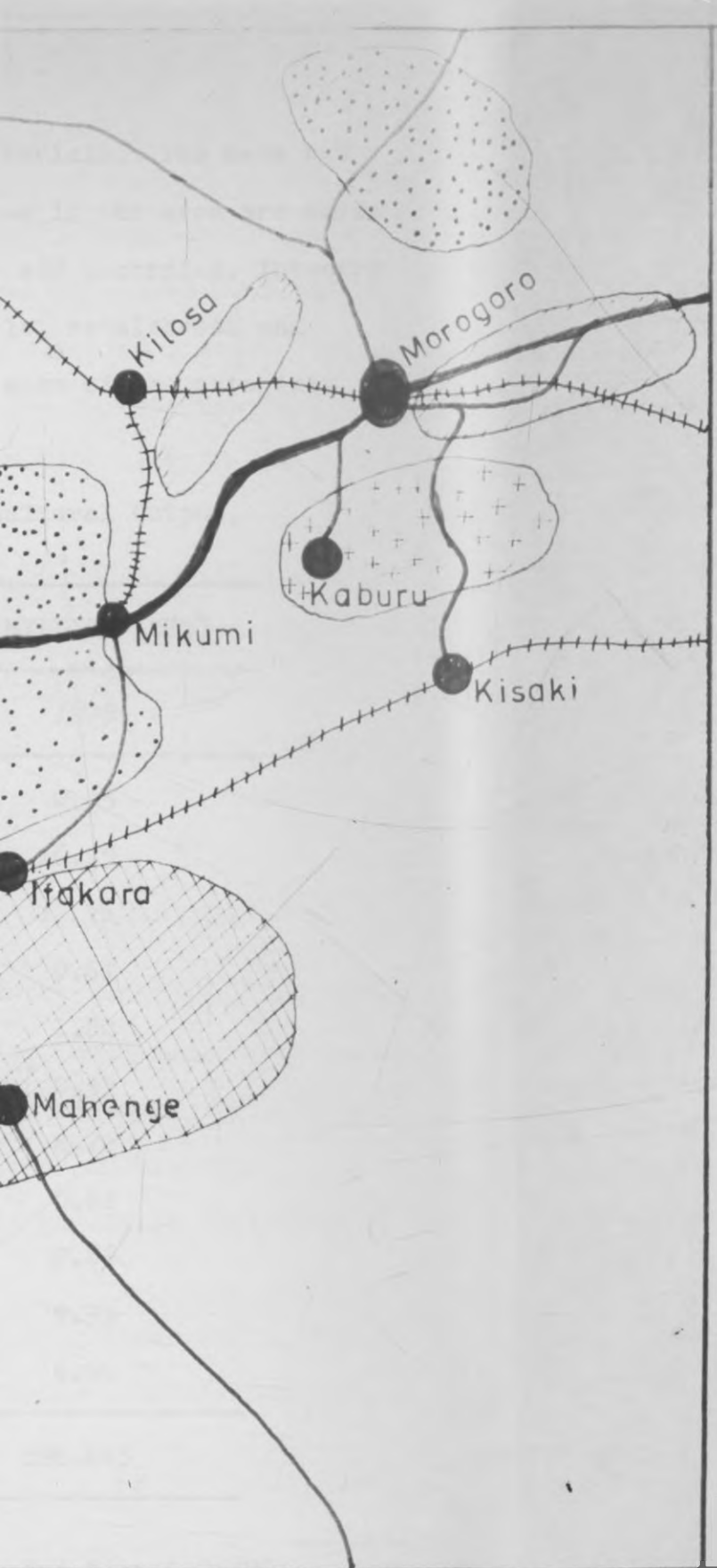

LEGEND

- Railways
- Road
- Tazam Highway
- Fruits
- Timber
- Sisal
- Sugar Cane & Rice
- Maize, Millet & Cassava

- INDUSTRIAL
IALS FOR
RBAN·

By S. M. Mghweno
Planning Department
June 1977

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either processed or unprocessed materials. The main raw materials for small scale industries in the area are maize wheat, cassava, sisal, fruit, clay and quarrying, forestry products, leather, textile materials, metalsheets and cement. The quantity produced of some of the materials is below.

Table No.43, Regional Agricultural Output.

C R O P	GROSS VALUE IN MILLION (SHS)	
	1970	1975
Casnewnuts	0,04	0.23
Sugar Cane	13.35	16.95
Sisal	57.11	14.11
Millets	2.82	0.61
Onions	1.20	1.20
Potatoes	0.09	0.35
Peas	4.56	2.72
Yams	0.15	0.01
Bananas	0.88	2.86
Fruit (other)	1.01	9.93
Cassava	5.83	6.44
TOTAL	201.58	196.443

Source: Morogoro Region Integrated Plan 1975/76.

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5:2:3:4, Demand:

The market potential for future production of small scale industries depend on two aspects, the production from large industries and the future tastes of the consumer. It is recommended that the large industrial development would work hand in hand with small scale industrial developers.

In terms of demand certain features indicate the potentialities of certain industries, for example repair work for motor cars, ox carts, watches, refrigerators and radios; textile production; furnitures; metal products; leather products and building materials.

5:2:3:65, Finance:

The Morogoro Region Annual Development Plan, indicates that annula financial allocation for small scale industries since 1974 has been around 500,000 shillings. This amount excludes SIDO, National Bank of Commerce, District Development Corporations, and other parastals contribution to small scale industrial sector.

Other financial resources are from individuals, who are interested in carrying the activity as indicated in the survey.

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5:3, RECOMMENDATIONS:

The recommendations are made under the following assumptions, that the need to have an integrated urban and regional physical plan for the region would be taken care of as soon as possible; that the programmes that would take place int the urban area would try not to be in packages form; for example upgrading ofunplanned settlement is recommended to include some economic elements in its programme so as to help in alievating some of the employment problems or industrial development projects would take into its project the provision of housing, transportation and other community facilities required or lacking in the area.

It is, therefore, assumed that the need of other sectors have already been taken care of.

5:3:1, The basic strategy:

(i) Establishment ofi industrial co-operatives or Ujamaa ownership basis, where common facilities will be provided.

(ii) Establish industries producing construction materials to improve low income housing, as well as supplying ~~worsh~~ worksheds and many other types of building projects in the area.

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(iii) Establishment of industries producing simple consumer goods and services to meet the needs of the expanding internal market accompanying increased incomes.

(iv(An industrial location policy to utilize the existing labour force, market and capital in the low income housing community.

5:3:2, Ownership structure:

The philosophy of Ujamaa and self-reliance in Tanzania does not lend support to individual small scale units. Therefore, group action in one of the following forms, to obtain strength in the production and distribution is recommended. See the attached chart.

5:3:2:1, Ujamaa Development:

Many of the industries in particular lend themselves to Ujamaa Development. The cell concept of member control of the community should be extended to include the number of cells required for a project. For example if twenty members are required for a woodworking industrial project, two cells should form within the community organization for specific work. The group or cell responsible for trade and marketing of community products

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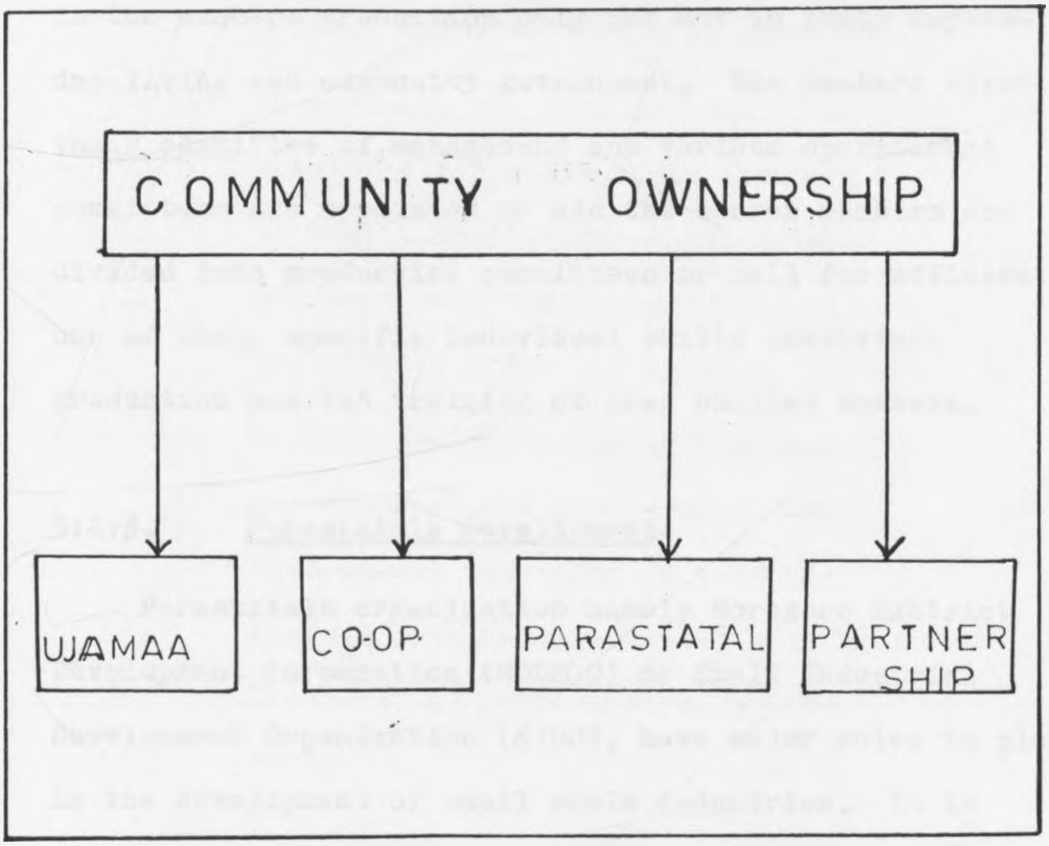
CHART NO. 1 PROPOSED OWNERSHIP STRUCTURE FOR SMALL INDUSTRIES



By. S.M. Mghwana

adds the selling of the wood to their job. Similarly, the raw materials purchasing of equipment, stores etc., become the responsibility of each respective cell or organizational department of the total community structure.

5:3:2:2, Co-operative Development:

Co-operative development possibilities are similar to the Ujamaa except that the co-operative is involved in the members production only and not in their day-to-day living and community government. The members elect their committee of management and various operational committees are appointed or and the worker members are divided into production committees or cell for efficient use of their specific individual skills involving production and the training of less skilled members.

3:2:3, Parastatals Development:

Parastatals organization namely Morogoro District Development Corporation (MODECO) or Small Industrial Development Organization (SIDO), have major roles to play in the development of small scale industries. It is recommended that MODECO should play the following roles:

(i) To provide the initial structure, workshops, estates, capital and technological know-how for the projects.

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(ii) Torrun basic industry in order to support and complement both large and small industries i.e. Maintenance Unit.

(iii) To co-ordinate and to continually asses the potential and performance of small scale industrial input to other industries.

(iv) To control the market which will ensure that the small industries do not over produce and avoid waste of materials.

(v) To eveluate the need for and provide subsidies for small scale industry in the initial stages until volume produced provides the economies of scale which makes the industry viable.

(vi) To delegate authority of Government and the training institutions which will ensure provision of training that is practical and which will meet the real and current needs of the workers.

MODECO is, therefore, the sole organizer of small scale industries in the district.

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5:3:2:4, Partnership Development:

Members of a partnership are jointly and severally responsible for the financial arrangements of their business enterprise. The financial risk is greater to the individual than when a member of a co-operative. Partnerships are often recommended as a stop gap for individuals interested resources to develop and utilize their particular skills. When successful, they can become a part of large multi-purpose co-operative.

5:3:3, Industrial Location:

The need to co-ordinate industrialization and urbanization policies is apparent in any consideration of the industrial location facilities which a can play an important role in both economic development and sound urban development and can serve as an important bridge between industrialization and urbanization policies in the area.

Location policies must try to involve as many people as possible in industry, to top the community market and to avoid noise and other disturbances from industries which go against residential areas. It is recommended to have an industrial location hierarchy or industrial location levels as related to low income housing communities in Morogoro Urban.

Below are tables presenting summary of the main factors affecting various industries in terms of location.

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Chart No.2, Location Factors for Urban Small Scale Industries Morogoro Urban*

PROPOSED INDUSTRIES	FACTORS					
	1	2	3	4	5	6
Carpets and Mats	X	X				
Leather Finishing	X	X				
Leather Goods		X		X		
Cloth Finishing	X	X				
Boats & Shoes		X		X		
Bread	X	X		X	X	
Fruit Canning		X	X			
Furnitures		X	X			
Stationary		X	X			
Sand Lime Brick	X	X	X			
Clay Bricks	X	X	X			
Oil Seed Crushing	X	X	X			
Construction	X	X	X		X	
Motor Repairs	X	X			X	
Metal Furnitures	X	X			X	
Repairs	X	X			X	
Cotton Weaving	X	X	X			
Rope & Twine	X	X	X	X		

* Main Determining Factor.

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Key: 1. Market local concentrates
2. Labour
3. Transport
4. Linkage
5. Services
6. Wastes

Chart No.3 Industrial Nuisance.

PROPOSED INDUSTRIES	NOISE	SMELL OR FUMES	FLIES OR VERMIN	DUST AND GRIT
20 Sand Lime Bricks				X
20 Clay Bricks				X
39 Oil Seed Crushing		X		
58 Construction				X
91 Motor Repairs	X			
94 Metal Container	X			
99 Metal Furnitures	X			
101 Watch & Clock Repairs				
111 Cotton Weaving				
117 Rope & Twine				
120 Carpets & Mats				
130 Leather Finishing				
131 Leather Goods		X		
141-2 Cloth Finishing				
148 Boots & Shoes			X	
151 Bread		X		
157 Fruit Canning		X	X	
171 Furniture	X			X
183 Stationary				X

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* Only when management fail to control production and wastes.

5:3:3:1, Industrial Community Centre:

It is recommended that some of the small scale industries e.g. household industries in the community continue with little reorganization. Such activities like handicrafts, tailoring and knitting can be organized into co-operatives. The main responsibility for such co-operative will be to provide the requirements of its members, for example provision of materials, training centre, receiving orders and marketing of the finished product.

The co-operative will, therefore, be required to have a selling post which will be known as Industrial Community Centre, the centre will be the headquarter of the co-operative functions.

The location of the centre is recommended to be in the premises of industrial neighbourhood workshed, which is recommended in the next level. It is also recommended that members for such co-operative should not exceed 400 people whenever is possible. This is aimed at reducing management problems.

5:3:3:2, Industrial Neighbourhood Workingshed:

The industrial Neighbourhood Workshed is a structure for the purpose of industrial works only. It might have facilities or not, this will depend on the type of industries coming in.

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The shed is recommended to be strategically placed in the community. The following factors should be taken into account during planning.

(i) The site has to attract particularly the utilization of partially employed housewives and others e.g. part-time workers for the production of industrial goods.

(ii) The site should encourage the utilization of the community market.

(iii) The workshed is recommended to be formed by bringing together some of the existing small scale industrial units.

(iv) The workshed will bave to operate on labour intensive technology by s using simple appliances and non-noxious processes.

(v) The workshed will have to be organized on Ujamaa or Co-operative or parastatal and each sheet is recommended to serve at ~~leax~~ least 50 people, if it is possible. The workshed should be one of the economic units in the Ward.

(vi) Whenever the initial area is selected, provision should be made for minimum expansion if it requires a large area in excess will be required to move into industrial zone.

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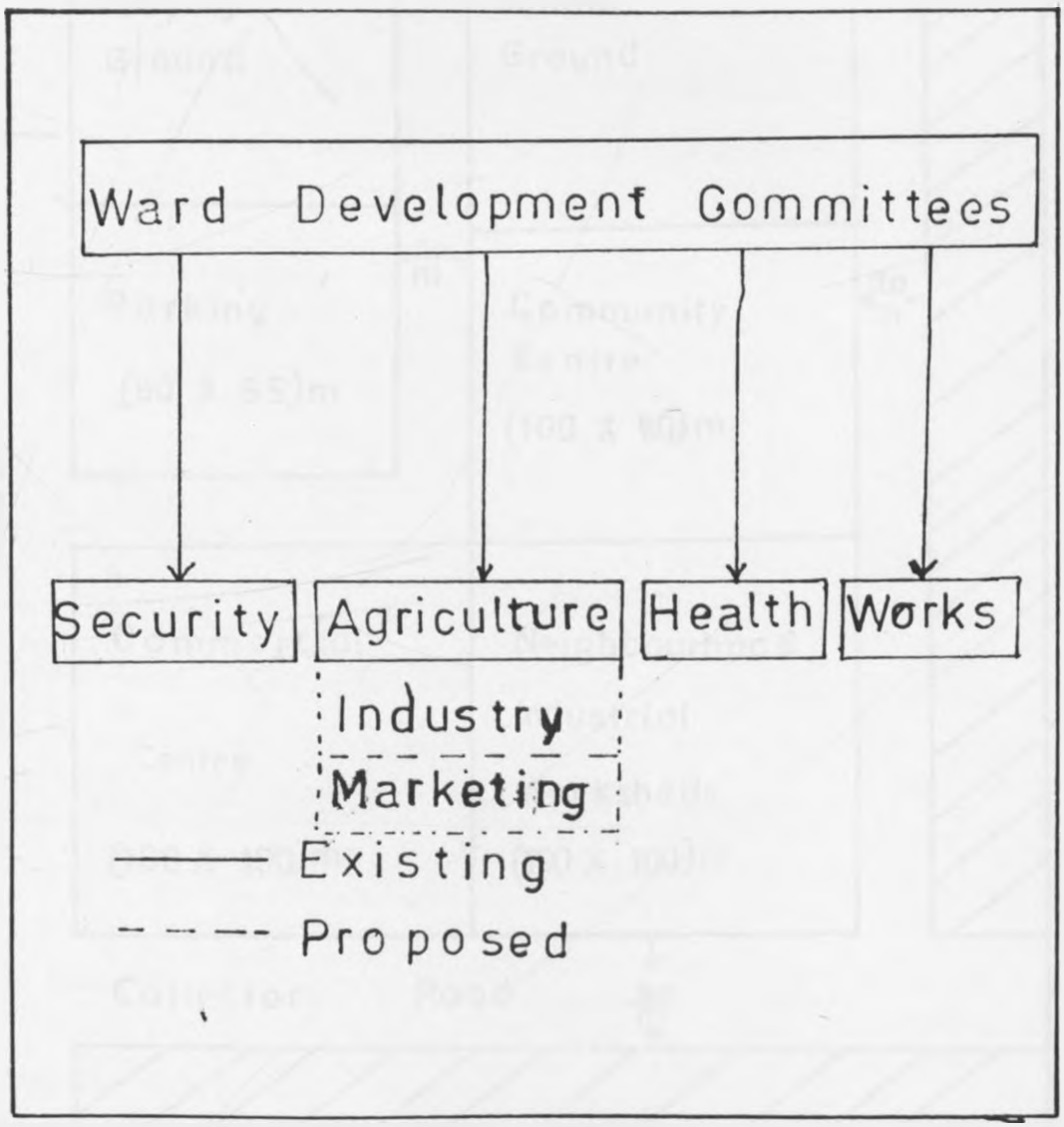
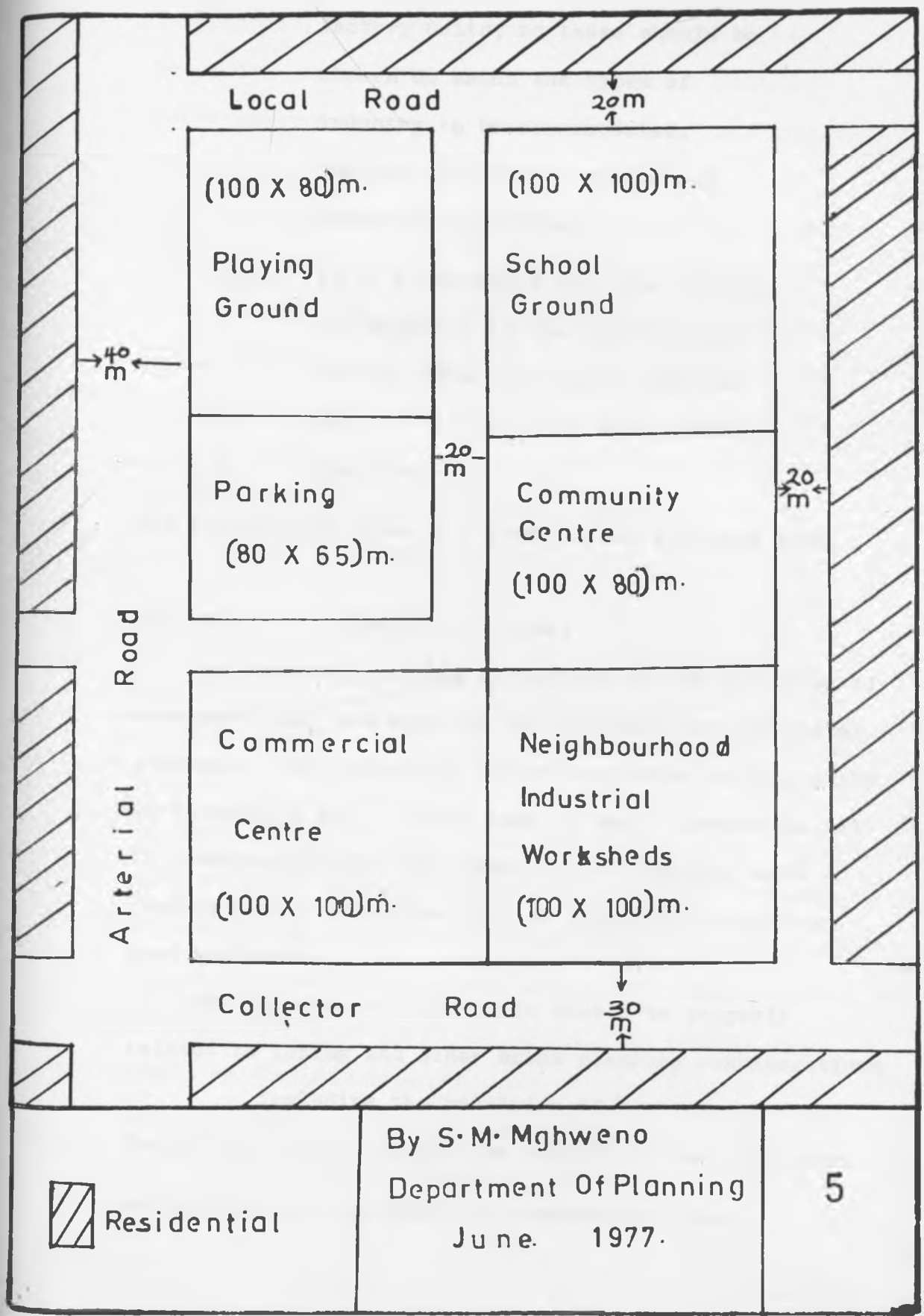
CHART: NO. 4 PROPOSED WARD DEVELOPMENT COMMITTEES



By. S. M. Mghoeno

A CONCEPTUAL REPRESENTATION OF NEIGHBOURHOOD SMALL SCALE INDUSTRIES



(vii) There are no rules that could be established for the size of factory units, as these should be chosen do match the types of industry to be accommodated. However, 2.5 square metres per worker is desirable.

(viii) It is recommended that the initial construction of the shed be done through self-help basis with the help of the District Development Agencies.

The recommended sites are shown in the attached maps.

5:3:3:3, Industrial Estate:

An industrial estate id defined as the provision of developed land and possibly of buildings for industrial purposes. The industrial estate can house various sizes of industries but in the case of small industries, it is recommended that the estate houses somewhat more sophisticated industries than in industrial neighbourhood worksheds.

The location of the estate should be properly related to zoning and other urban planning considerations including the provision of housing and other facilities for the population engaged in the industrial activities. It is,therefore, recommended that

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co-ordination between urban development authorities include, the Ministry of Lands, Housing and Urban Development, Ministry of Works, Ministry of Water, Power and Energy, Ministry of Industries, National Development Corporation, Small Industrial Development Organization and the developer.

The industrial estate is recommended to be owned and organized on one of the following, Ujamaa, Co-operative, Parastatal and Partnership. The estate should be under the District Development Corporation in our case MODECO for supervision and other guides.

The labour force recommended in the estate, should be full time workers, and certain skills should be specified as the mimimum requirements for the labour force.

According to Small Industrial Development Organization programme each regional headquarter town in the country is to get one estate, Morogoro is one of these towns. One estate is being constructed by the Morogoro Leather Complex. The Morogoro Leather Complex is a multiple industry project which include a tannary, a canvas mill, a shoe factory and an industrial estate cateringto the needs of smaller product related enterprises. The location of the industrial complex is shown on the attached map. The estate includes small units for shoes production, handloom units, tents, uniforms and fafari outfits.

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5:3:4, RECOMMENDED INUSTRIES:

After assessing, the available local materials, available skills, existing industries, Regional Development Plans, Organization and observed experience elsewhere, it is recommended that some of the small scale industries be transformed to match with the technology and demand, and some new small scale industries be initiated.

3:4:1, Existing Industries:

The recommednded, existing small scale industries which will require transormation to meet their conmers demand are:

3:4:1:1, Leatherwork: The future of leatherwork is based on the utilization of Morogoro Leather Complex. The Complex will be producing for export market, hence the small leatherwork is recommended, to produce for local and regional market. The location of such leather-work is recommended to be in the industrial neighbour-hood workshed, so as to tap the existing local resource.

5:3:4:1:2, Carpentry: The production ofhousehold furnitures, office equipments and furnitures and some building materials e.g. doors, windows etc. are in high demand and as long as the construction of houses and establishing of household continues, the industry will have future prospects. At present the town is faced with a shortage of about 1,500 housing units.

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5:3:4:1:3, Construction:

The construction industry here includes, housing and road construction and maintenance. From the shortage of houses in the town itis clear that the industry is going to have a reliable market. The industry has two alternatives to produce building materials e.g. bricks or to be involved in actual construction, or both of them are feasible.

5:3:4:1:4, Textiles:

The production ofready made garments e.g. school uniforms and children clothes indicates that the inds industry can acquire very high demands. The industry is highly recommended because itis the only one which can employ more female than any other industry in the area.

5:3:4:1:5, Metalwork and Repairs:

Metalwork is promisingin terms of its product. Metalwork here includes blacksmiths. The demand for household metal goods and agricultural implemnts is as high as the demand for carpentry goods. The industry has prospect to advance to factory level e.g. Light Engineering.

It is recommended that metalwork small scale industries be encouraged in the industrial estates and repairs of all related metalwork could be located at the neighbourhood workshed, to service for household needs and demand.

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5:3:4:2, New Industries:

The recommednded new small scale indutries are based on the available resources. These industries are based on agriculture products. These industries are as follows:

5:3:4:2:1, Ropes andMats:

These are based on sisal fibre, which is the regional highest income earner. The prospect market for such industry is export of mats to Zanzibar and coastal regions of Tanzania for clove and casewnut Industries. At present these industries satisfy their demand by importing these mats.

5:3:4:2:2, Fruit Canning:

Morogoro Region is the main suplly offruits to Dar es Salaam Market but as the future indicates the supply of fruits from Usambora and Mheza in Tanga Region & Dar es Salaam Market will affect its gardens monopoly.

It is, therefore, recommended that fruit canning industry be established as a method of preserving fruits for future needs and for export.

5:3:4:2:3, Groundnut and Cotton Oil:

At present the campaign to intruduce cotton and groundnut as the main cash earner instead of sisal is showing good results. It is, therefore, recommended that a small scale industry be established as a means to utilize cotton seeds and groundnut which are at the moment wasted.

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5:3:4:2:4, Bakery:

As the population of the town is expected to be around 80,000 by 1985, establishing ofa bakery in the area shows prospect. Today most of the bread consumed is produced from a small bakery and some come from Dar es Salaam.

The bakery is going to utilize the products of National Milling Corporation products in the area. The mill at present prepares wheat, maize and cassava flours.

5:3:5, MANAGEMENT:

5:3:5:1, Policy:

Long standing and recent statements of policy Government stress Ujamaa and Co-operative Development particularly in the area of production. It is, therefore, recommended the following management of industrial workshop ore estates.

5:3:5:2; Capital:

Capital to commence Ujamaa or co-operative operations should be supplied through members share, equipment and labour, members loans, and from loans from the public. For example the construction of a neighbourhood industrial workshed should be done through self-help activities, and in case of complex industrial estates loan from the public through SIDO and DDC. These parastatal eill have a major role during construction

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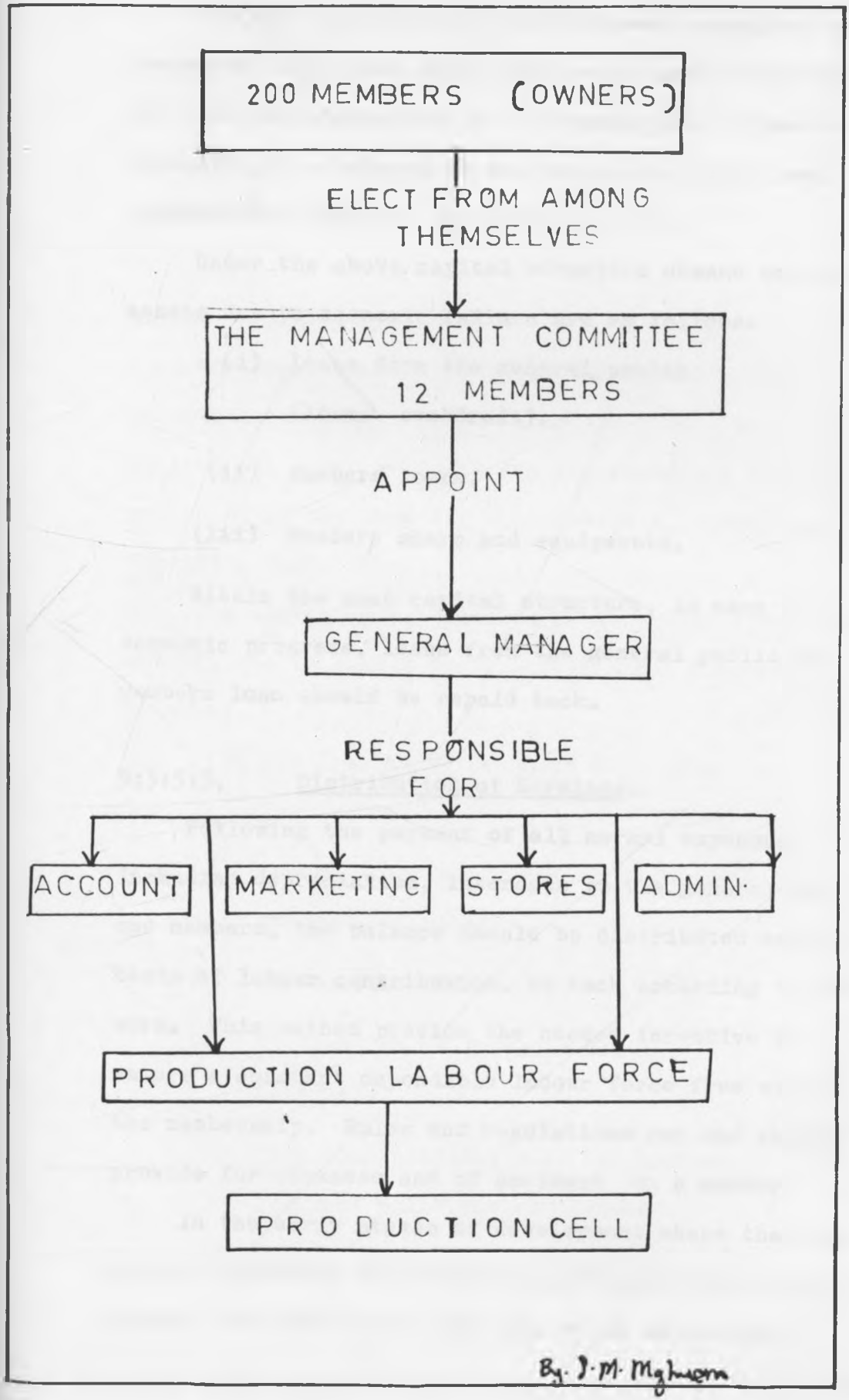
CHART NO: 6. PROPOSED MANAGEMENT STRUCTURE FOR SMALL INDUSTRIES.



and management ofsuch complex.

Members loans can be the investment equalizer and the~~invest~~ investment opportunity which can be controlled and even made compulsory by the membership to ensure availability of expansion and operation capital and repayment of loans to the general public.

Under the above capital structure demand on the assets due to economic failure are as follows:

(i) Loans from the general public (loans, overdraft).

(ii) Members loans.

(iii) Members share and equipments.

Within the same capital structure, in case of economic progress, loans from the general public and members loan should be repaid back.

5:3:5:3, Distribution of Earnings:

Following the payment of all normal expenses including depreciation, interests to the general public and members, the balance should be distributed on the basis of labour contribution, to each according to his work. This method provide the needed incentive to ensure a constant dependable labour force from within the membership. Rules and regulations can and should provide for sickness and of accident to a member.

In the early stages of development where there is a marked difference in the skills and experience of the members the above ideas may have to be implemented

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slowly, by offering a bonus to certain type of skills.

5:3:5:4, Organization of Labour:

The proposed chart for the management of an industrial workshop or estate with 50 - 200 members would be based on the cell system.

5:3:6, TECHNOLOGY:

The appropriate technology for Tanzania Small Scale Industries is one in which individuals or a group can channel all their physical and psychological resources and pursuing the need for achievement by creating or expanding their firms.

The appropriate technology must, among other things satisfy the following basic criteria for Tanzania economy:

(I) Low investment compared with local income resource.

(2) Labour - intensive and or employment generation capacity.

(3) Minimum infrastructure.

(4) Utilization of indegenous raw materials.

(5) High compatibility with the socio-cultural political environment.

(6) Easy operations and maintenance of hardware companents.

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(7) Maintenance of the highest possible degree of flexibility.

(8) Simplicity in the design of moving or wearable components.

(9) Simple set-up and quick changeover.

(10) As much as possible "reusability" of wastes for other applications.

5:3:7, EMPLOYMENT:

The objective of creating employment has important policy implications for planners and policy makers. The first relates to the choice of technology of implementing small scale industrial projects, the second relates to the social problems created by the rapid increase in urban population. The elimination of employment problems is a major objective of the programme.

It is recommended that preferences should be given to labour - intensive industries and an effort should be made to stimulate research on the adaption of technology to the factor endowment of the area.

It is also recommended that while encouraging labour intensive industries, Small Industrial Development Organization SIDO should work towards the establishing of small scale industries that are increasing sophisticated and automated in order to attain a higher level of industrial development.

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Table No.44, Labour Force and Number of sheds, Morogoro Urban, 1977/78 to 1981/82.

	ITEMS			
INDUSTRIAL HIERARCHY	1	2	3	4
Industrial Community Centre	15,000	5	Household Labour	N.A
Neighbourhood Industrial Workshed	5,000	16	-Housewives -Part-time -Children -Others	215
Industrial Estate	30,000	1	-Skilled -Full time -National Employment Machinery	90

Source: Based on SIDO and Sites and Services Project.

Key : 1. Population to be served per shed.

2. Number of sheds proposed in Third Five Year Development Plan.

3. Nature of Labour Force.

4. Estimated Employment.

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TABLE NO.45, RECOMMENDED EMPLOYMENT BY FIRMS

(FIVE YEARS) 1977/78 to 1981/82

F I R M S	NO UNITS	EMPLOYMENT	NO. OF SHEDS.
1. Leatherwork	5	15	3
2. Carpentry	5	20	3
3. Construction	4	35	2
4. Textile	20	15	2
5. Metalwork	7	35	2
6. Coir, Ropes and Mats	30	25	2
7. Cotton & Groundnut Oil	2	30	1
8. Fruit Canning	2	30	1
9. Bakery	1	90	1
		275	17*

* Excluding Five Industrial Community Centres.

5:3:8, GOVERNMENT ASSISTANCE:

It is recommended that services for small scale industries by the relevant ministries of the Government or National Parastatals should not extend directly to the community level, some intermediate level between the national and the community level is necessary. It is suggested that the Region and District undertake to organize in an integrated fashion the services necessary. The department of Ujamaa and Co-operatives in the district should take the responsibility.

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5:3:9, TRAINING:

Training for the project is very important, therefore, Mobile Training Units which are used extensively in many rural areas of the world i.e. India, Saskatchewan Canada, Pakistan, etc, to assist in the development of technical know-how and use of power tools and machines is recommended in Morogoro District, which is both rural and urban. One Mobile Training Units for the district is enough for the first five years.

These mobile units usually consists of two types,

(i) A mobile van which includes a complete demonstration packages, consisting of raw materials, machines and instructors capable of teaching the use of the package to relatively unskilled people with high interest in the particular projects. The workshop is self-contained and instruction takes place beside the unit.

(ii) The other type is simply a transport vehicle capable of moving the machines and necessary staff to a given site, where they are set up as a demonstration training project in existing facilities i.e. in the industrial community centre in the workshop oforganization interested in the training.

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This extension tool is ~~na~~ an economical method of taking training to the people in their own surroundings, hence the best method of utilizing all available resources during training.

5:3:10, Marketing:

Small scale industry, whether ~~i~~ processing food for local consumption, manufacturing a product for export or whatever is faced with marketing problems at three levels, local use within their organization and community, outside the community but within the country and outside the country for exports.

3:10:1, National Objectives:

The objectives of a marketing system in Tanzania can be summarized as, to provide the products with fair, long-term reward for their productivity, pricing of basic needs of food, shelter and clothing within the reach of the country's citizens, and to ensure adequate storage ~~of~~ for surplus products in time of glut and to take care of need in the times of scarcity.

3:10:2, Recommendation:

(i) Each Small Scale Industry is recommended to assess its market~~ing~~ potential and plan the type of marketing structures required.

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(ii) A product that is consumed locally should be marketed by an arm of the production unit of the Workshed.

(iii) Products for inter-region and export can be handled most efficiently by relevant National Marketing Agencies e.g. Regional Trading Companies or Marketing using of Small Industry Development Organization.

5:4, CONCLUSION:

The approach recommended is primarily a device for expanding, strengthening and locating of small scale industries as part of a broad programme of industrialization and urban development. It has a unique role to play in economic and social development in the urban area. It is a guidance to minimize the ensuing economic and social dislocation by planning from the outset for the workplace and the dwelling to be related to each other and for the development of the necessary infrastructure.

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Chart No.7, Summary of the Recommendations:

ACTIVITY	FACILITY	LOCATION	ECONIMIC UNIT
1. Purchasing Raw Materials 2. Marketing 3. Training	Industrial Community Centre	Strategically located in the Community	Ward Development Committee
1. Purchasing Raw Materials 2. Production 3. Marketing 4. Training	Neighbour-hood Workshed	DO	DO
1. Purchasing Raw Materials 2. Production 3. Marketing 4. Training	Industrial Estate	Industrial area	District Authorities

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Table No.46, Summary of the Recommendations:

FACILITY	ITEMS			
	1	2	3	4
Industrial Community Centre	5	15,000	N.A	N.A
Neighbourhood Industrial Shed	16	5,000	215	470.0
Industrial Estate	1	30,000	90	225

Key:

1. No. of sheds.
2. Population to be served by one shed.
3. No. of people to be employed.
4. Covered Area by the sheds, in square metres (2.5 per worker).

50% of the plot.

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CHAPTER SIX

IMPLEMENTATION

6:1, I N T R O D U C T I O N:

To provide the needed space, infrastructure and organization structure for small scale industries in the low income housing community several agencies are involved. It is, therefore, recommended that full co-ordination among them is necessary for the success of the plan. To avoid any problem it is recommended that Morogoro District Development Corporation be the chief client of the project.

The agencies involved are Small Industrial Development Organization, Prime Minister's Office, Morogoro District Development Corporation and the Ministry of Lands, Housing and Urban Development. These agencies are only required during implementation period. At the time actual operation the recommended ownership and management structure would take their relevant duties.

The basic infrastructure cost would include preparation of the land, electricity, water, drainage and the actual workshed, cost per square metre is estimated to be around 650 shillings. In order to reduce costs construction is recommended to emphasize using a combination of traditional building materials and earthen floors with cement under the areas needed for machinery.

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6:2, IMPLEMENTATION AGENCIES:

Several institutions are involved in urban development in the country. These agencies would be required to carry certain duties during implementation. The duties are divided as follows:

6:2:1, PRIME MINISTER'S OFFICE(P.M.O):

The office is reponsible for all regional development duties in the country, this include even District Development Corporation. Through the Regional Office in Morogoro, the P.M.O. would be required for the formation of Small Scale Industrial Organization and Management. They are expected to mobilize the people for self-help activities, in order to reduce costs and allowing people to participate in decision making for the project.

The office will be required to supervise and give material support whenever is necessary during actual operation.

6:2:2, Morogoro District Development Corporation, (MODECO):

The corporation is one of the district's direct production wing. It is responsible for various projects including transportation, agriculture and industry. It took some of the former local authorities functions.

The coporation will be the client of the project on behalf of the Ward Committees. It will be responsible for co-ordinating the varies agencies. In order to carry

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these responsibility the corporation will need help from Small Industrial Development Organization very often e.g. manpower and training.

6:2:3, Ministry of Lands, Housing and Urban Development (ARDHI):

The Ministry would provide appropriate location, space and site infrastructure needs. The site infrastructure includes accessibility, water, and drainage. At the same time preparing the right of occupancy of the plot for the relevant organization formed.

6:2:4, Small Industrial Development Organization (SIDO):

The organization would take its national role in the promotion of small industries by providing both financial and technical support. The organization would, therefore prepare feasibility studies and design of various types of industries to be submitted to Tanzania National Bank of Commerce, or Tanzania Rural Development Bank ~~of~~ or Tanzania Investment Bank for loan.

The organization would also check through District Corporation the methods of repaying the loan.

6:3, COSTINGS:

The costings of implementing the plan is only part of the planning process. It explains the plan to all the people interested in it, perhaps affected by it after it has been made. It also helps to ensure that plan

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implementation budget is not exceeded, and continues to tie in with other plans.

The source of various prices were obtained in the following offices, sites and services small scale industries components, Ministry of Finance and Planning, Small Industrial Development Organization, and Regional Trading Company. The costing components is divided in two; first the construction of the sheds, and secondly the cost of machines, equipments and vehicle for various units.

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Table No47, Cost of the Sheds *

INDUSTRY	EMPLOY-MENT	NO. OF SHEDS	SHED SIZE SQ.M	TOTAL (T.SHS)
1. Leatherwork	15	1	38	24,700
2. Carpentry	20	1	50	32,500
3. Construction	35	3	90	58,500
4. Textile	30	2	75	48,750
5. Metalwork & Light Engineering	30	3	75	48,750
6. Ropes & Mats	25	2	65	42,250
7. Groundnut & Cotton Oil	30	2	75	48,750
8. Fruit Canning	30	1	75	42,250
9. Bakery	40	1	100	65,000
	255	13		411,450

* 2.5 Square metres per worker

* 650 Shillings per square metre

* Excluding self-help (30%) performance

* The shed occupy only 50% of the area.

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Table No.48, Cost of the Equipments.

INDUSTRY	NO. OF UNITS	TOTAL COST (T.SH)
1. Leatherwork	5	20,000
2. Carpentry	2	20,000
3. Construction	4	25,000
4. Textile	2	25,000
5. Metalwork & Light Engineering	7	30,000
6. Ropes & Mats	2	12,000
7. Groundnut & Cotton Oil	1	100,000
8. Fruit Canning	1	100,000
9. Bakery	1	250,000
10. Van	1	200,000
	26	782,000

Table No.49, Cost of Industrial Community Centres.

AREA		NO.	COST T.SHS
A	South West	1	40,000
B	Kichangani	1	40,000
C	Msamvu	1	40,000
	TOTAL	3	120,000 *

* Exclude labour force/self-help.

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The total cost of the project estimated to be as follows:

PARTICULARS	COSTS
1. Buildings	411,450
2. Industrial Centres	120,000
3. Equipments	782,000
4. Contigency (15%)	137,917
TOTAL	1,451,367

The project would be able to employ 255 in 13 sheds including one Bakery Complex and 3 Industrial Community Centres aimed at stabilizing the household industrial activities.

6:4, PHASING:

The phasing of the plan implementation is necessary as a tool to meet the regional planning procedures. The proposed method for presentation is simplified Critical Path Analysis (CPA). It has been selected because of the following advantages:

1. The method ensures that the logic of plan implementation is correct.
2. The method provides a measure of the importance of each part of the plan and leads to phasing being done in the economic way.

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3. The method decribes a plan graphically in such a way that it is an invaluable basis for control action.

The implementation of the plan would be divided into three major elements, the formation of organization and management structure, the actual construction of the buildings required, and the operations.

In phasing the plan, it is necessary to categorize the major activities.

Table No.50, Major Activities

NO	ACTIVITY	MONTHS
1	Organization & Management	12
2	Fund Raising	12
3	Feasibility Studies & Design	12
4	Site Allocations	6
5	Site Clearing	6
6	Site Infrastructure	6
7	Building Constructions	18
8	Ordering Equipments & Tools	24
9	Installation	6
10	Ordering Raw Materials	6
11	Testing	3
12	Actual Operations	-

The phasing of the plan need to take into consideration of the existing planning procedure, so as to avoid

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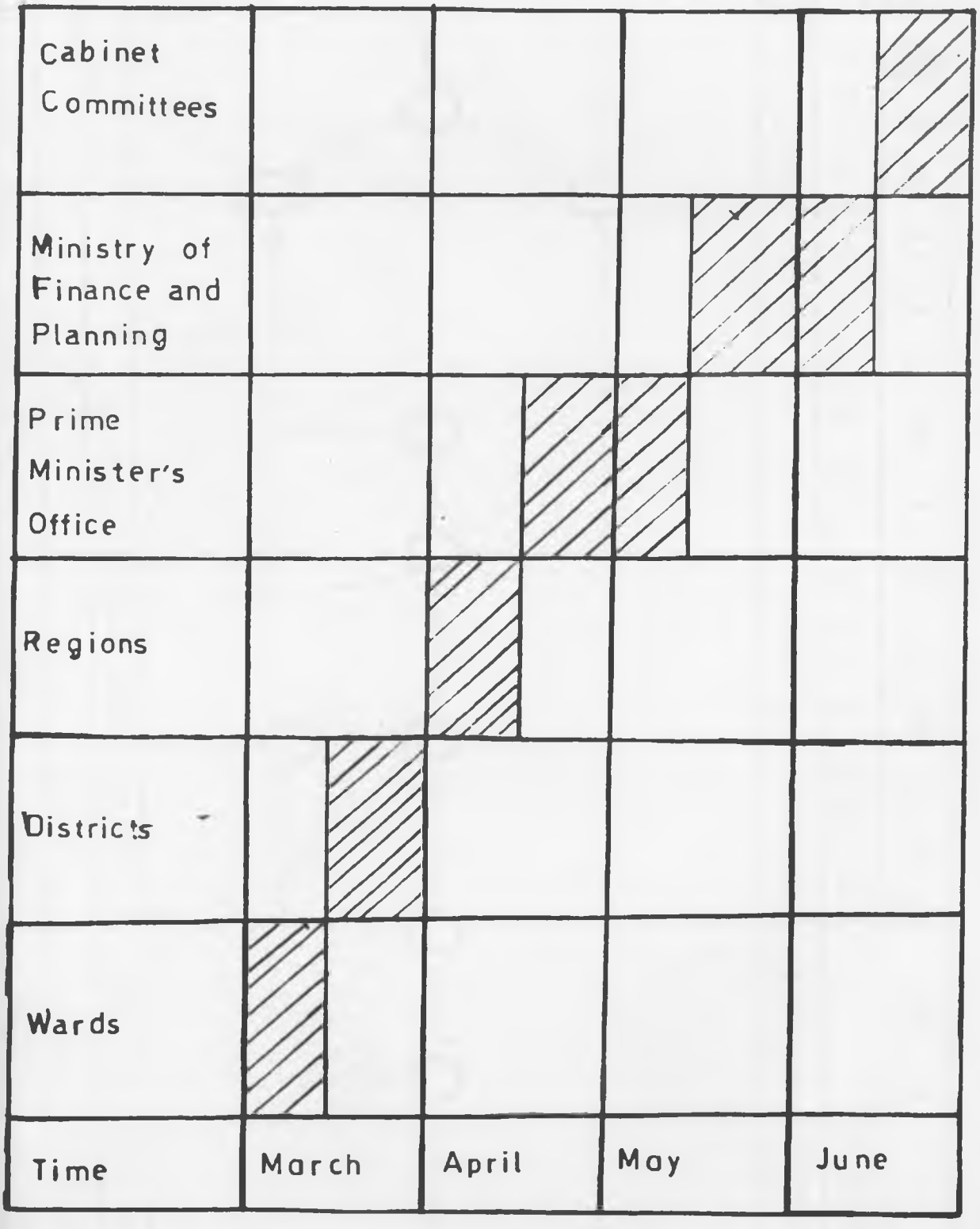
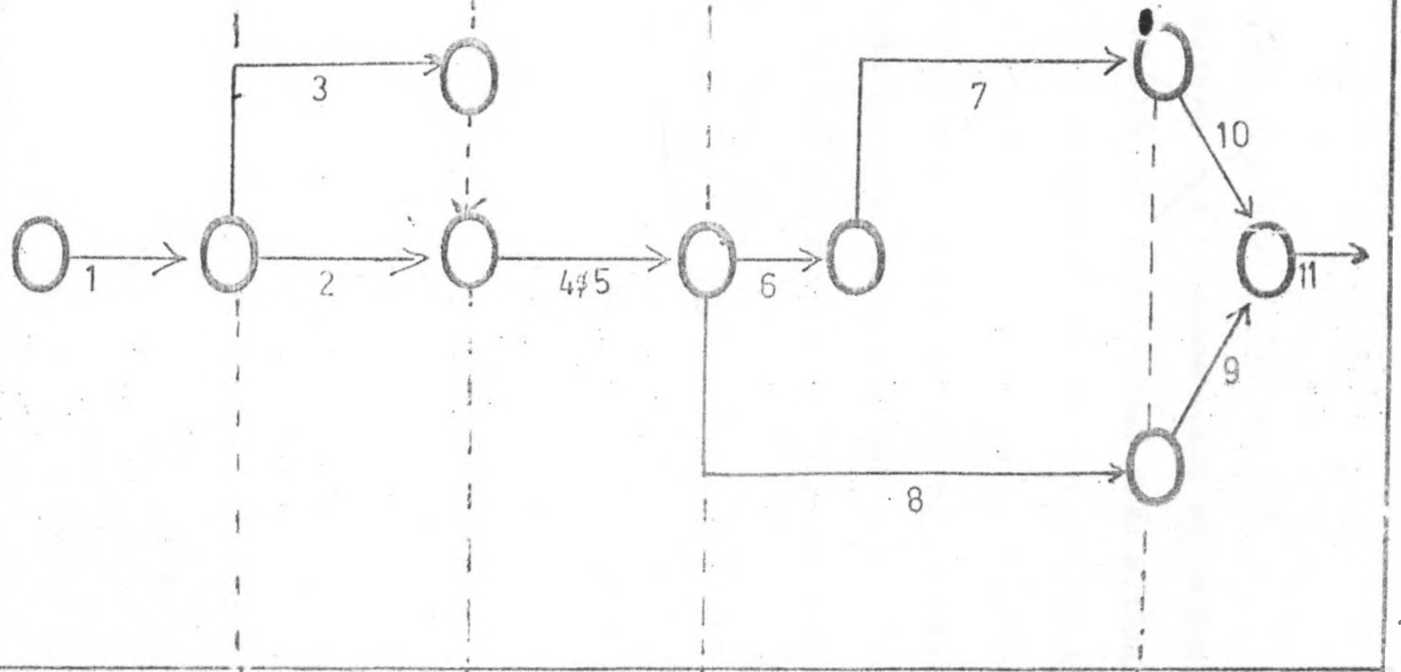
Chart No. 8, Time chart for Annual Regional Plans in Tanzania.



Where Plans are being discussed.

YEARS 19	78/79	79/80	80/81	81 — 83	83/84
MONTHS	12	12	12	24	15
COSTS T.SHS	125,000	125,000	910,000	700,000	125,000
ACTIVITIES					
AGENCIES 1	P.M.O.	P.M.O.	ARDHI	S.I.D.O	D.D.C
AGENCIES 2		S.I.D.O.	S.I.D.O.	A R D H I	S.I.D.O.



PROGRAMMING

1. Setting Organization and Management
2. Raising Funds
3. Feasibility Studies
4. Allocation Of Site
5. Site Clearing
6. Site Infrastructure
7. Actual Construction
8. Ordering Equipment
9. Installing Equipment
10. Ordering Materials
11. Testing Equipment

○ Activities Starting

→ Activities Ending

By S. Mghweno, Planning Dept. June, 1977.

IMPLEMENTATION 9

an inconvenience in budgeting. The Chart Number 8 presents planning procedure in Tanzania. The month of March in every year is the beginning of most plan proposals. Chart Number 9 presents the implementation of the plan. The plan implementation is expected to be completed by September, 1984.

6:5, SOURCE OF FUNDS:

The main source of funds would be as faollows from Regional Development Fund, a loan from National Bank of Commerce with an interest of 8% recoverable in the first five years of operations, Morogoro District Development Corporation as a loan too, and the participation ofthe members both in terms of labour and cash. Table number 51, presents how the finance would be contributed during implementation.

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Table No. 51, Source of Funds (T.Shs)

(000/=)

YEARS	SOURCE 1	2	3	TOTAL
1974/75 *	125,			125,
1975/76 *	125,			125,
1976/77 *	125,			125,
1977/78	125,			125,
1978/79	125,			125,
1979/80	125,			125,
1980/81	125,	785,		910,
1981/82	125,		450,	575,
1982/83	125,			125,
1983/84	125,			125,
TOTAL	750,	785,	450.	1,985,

*Source: Regional Annual Plans 1974 - 77

Key:

1. Regional Development Funds.
2. National Bank of Commerce.
3. Morogoro District Development Corporation.

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6:6, EXPECTED BENEFITS:

The small scale industry would provide benefits in increasing and stabilizing employment, incomes, production and at the same time help in the implementation of the national policy of socialism and self-reliance. The benefits would be absorbed by the low income members of the community since the majority of people employed would be from the unskilled or semi-skilled workers who were either partially employed or unemployed.

6:7, CONCLUSION:

To realize the expected benefits of stabilizing employment, incomes andproduction would depend upon the effectiveness of Morogoro District Development Corporation in co-ordinating various agencies and the availability of 1.6 million shillings in the period between 1978 to 1984.

At the same time the performance from the plan would provide a feedback on Morogoro Urban Development and to other urban areas in the country, on how to improve urban and regional planning, planning is, therefore, a continous process. See the chart below.

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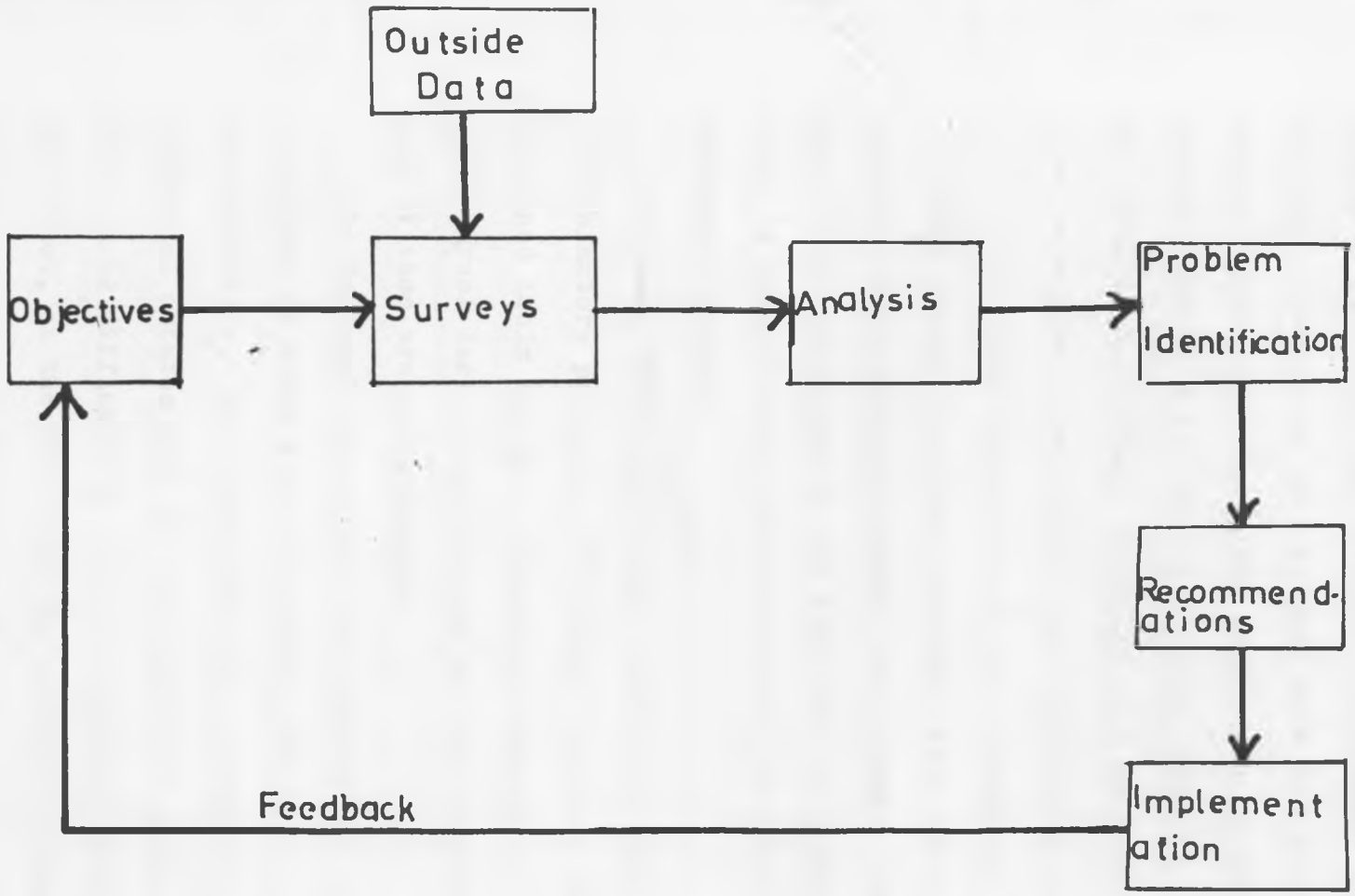

PLANNING PROCESS

By S·M·Mghweno
M A Planning 1977
NAIROBI UNIVERSITY

CHAPTER SEVEN

C O N C L U S I O N:

The past urban plans for Morogoro Urban did not give direct attention to small scale industries and to community participation in urban development programmes. The most affected in this respect were the low income housing community. The plans emphasised an orderly planned community in form of housing, schools, community and commercial centres. Although with no direct urban planning support these small scale industries have carried out their production in the community.

They supply the local community with goods and services and provide employment and income. They provide some of the solutions to the high rate of urbanization which is unfortunately accompanied by low level of urban employment growth.

However, these small scale industries operate under unsatisfactory premises, with simple worn-out and out-fashioned tools and poor management machinery. There is also a great lack of information of these industries and most of them are unregistered.

The National Policy for the promotion of small scale industries is sound but the problem lies with implementation. The developers have tended to located industrial estates deep in the industrial areas. Such location is difficult to tap the community labour force, and market, at the same time the community labour is unprepared to move to industrial areas.

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The industrial estates provided are much more expensive than what the people can afford. It was found that their monthly earning from the enterprise is hardly over 300 shillings per month is less than the standard urban minimum wage. However, these problems are not unique to Tanzania alone, experience from India and Kenya reveals that such problem prevail there too.

The industrial estate programme for small scale industries leave a gap between household industries and those in the industrial estates while the urban planning process leaves a gap between the community and the industrial area. It is recommended that an industrial development hierarchy be adopted in which certain industrial neighbourhood workshed and some community industrial development organization would be initiated in the process.

It is also recommended that in some urban development programmes participation of the people in decision making should be adopted. The Urban Ward should be utilized in the project preparation implementation and during maintenance. This approach might help to reduce some of the costs. The involvement of the people is expected to take longer time in planning than the previous planning process. However, The Arusha Declaration states ...."the purpose of all social, economic and political activity must be man - the citizens and all the citizens of this country" [40].

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7:1, Synthesis:

The study sets a number of assumptions which have either been verified or rejected.

First, it was assumed that there is an employment problem in Morogoro Urban both numerically and qualitatively. The urban employment in Morogoro Urban is acute. It was found that 9% of the adults of the household were unemployed and at the same time 47.9% of the adults had no permanent employment. These were employed as industrial casual employees, agricultural self-employees at the urban fringe and some house duties. The figure shows the seriousness of the employment problem because most of these sectors of the economy are subjected to very low and unreliable earnings. The urban primary school leavers were the most affected group, they consisted about 59.9% of the unemployed labour force.

Second, that the employment problem is mainly caused by the inability of the modern sector in labour absorption.

From 1967 - 1975 the employment sector in Morogoro Urban increased by 2,318 persons. The annual employment increase is, therefore, about 489 persons. In the same period population increased by 25,000 that is an annual increase of 3,000 people in the town. Employment ratio in this case is ~~b~~ about 1:6. It can be concluded that employment growth rate is very low as compared to population increase which is about 6.5% per year. Third, that the low absorption capacity of the modern sector has caused high growth on the urban in-

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formal sector activity for example small scale industries.

The survey indicated that small scale industries, agriculture and other small businesses consisted of 9.4% of the urban employed labour force in the town. The earnings from these activities were very low, hardly can a person earn more than 300 shillings on average per month. These people would prefer to change their employment situation if ways are possible to obtain more permanent jobs in the modern sector.

However, some of these informal activities were the result of part-time labour rather than full-time. These part-time employees were from the modern sector. About 29% of the labour involved in small scale industries were on part-time basis. It can be concluded that informal sector such as small scale activities will continue in the urban area even if the modern sector is able to absorb all the labour seeking employment.

Fourth, that the growth of small scale industry in the low income housing community has brought about misuse of urban land.

It has been noted that . these small scale in industries are haphazardly located within the residential community. The sites were determeined by several factors, availability of a house, backyard, verandah, open space, and areas unsuitable for building. These firms have brought about over use of urban community facilities for example garbage disposal.

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It can be concluded that the planner would have to reallocate land in the same community, if he is suggesting improvement because most of the firm showed reluctance to move from their present community. Fifth, that small scale industrial activity can be made a viable socio-economic activity in the community.

The survey on household demand for small scale industrial products indicated that as long as household establishing process continues, demand for furnitures, assorted metal, building materials and clothes will be needed. The community labour force and market provide sound social and economic reasons to establish these enterprises. Therefore, given proper planning these industries are capable of expanding and increasing their production.

7:2, Scope for Future Research:

As already pointed out it is notpossible to give concrete figures for each firm surveyed due to lack of detailed information. This has to be researched further because it is likely to improve the situation of small scale industries in urban areas. Further research should be conducted to establish standards for urban industrial planning techniques in Tanzania.

It is also suggested that research on other urban informal sector should be carried on, especially on urban agriculture land use. These research findings might improve and orient the present planning to be more inward looking to the community problems.

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APPENDIX A

MOROGORO URBAN

SURVEY OF CRAFT AND SMALL - SCALE INDUSTRIES

1. Questionaire No. _____

2. Type of craft or industry. _____

3. Owner:

   Name _____

   Site _____

   Area (Sq.M) _____

4. Manner of acquiring workshop:

   -started by present owner _____

   -has been bought _____

   -taken over form father/ Relatives _____

5. Year started to operate _____

6. Employment:

   (i) Number of people employed _____

   (ii) Relation to owner numbers:

   -Relatives _____

   -Not Relatives _____

   (iii) Monthly wages paid (Tshs) _____

   (iv) Type of industrial training:

   -Trade School _____

   -On-job _____

   (v) Number of apprentices if any _____

   (vi) Wages paid for apprentices _____

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7. Income:

(i) Types of goods produced_____

_____

(ii) Average output per month or week (Tshs)_____

(iii) Retail or wholesale trade connected with workshop:

Retail_____

Wholesale_____

8. Capital Assets:

(i) Total amount of capital invested in the workshop (Tshs)_____

_____

(ii) There of in machinery and equipment (Tshs)_____

(iii) In stocks (Tshs)_____

(iv) Type of Equipment_____

_____

9. Finances:

(i) Sources of first financing_____

_____

(ii) Sources of credit_____

_____

(iii) Average debts at_____

_____

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10. Division of Labour:

    Number of people working on one product_____

11. Working hours per week_____

    Often overtime yes or no_____

    Or part - time yes or no_____

12. Type of raw materials_____

    _____

13. Source of raw materials_____

    _____

14. Average amount of raw materials bought per month (T.shs)_____

15. Sales: Average amount of monthly sales (T.shs)_____

16. Plans:

    (i) Intension to expand business yes/No__

    (ii) Intension to open another branch Yes/No_____

    (iii) Intension to reduce business Yes/No__

17. Position in the market:

    Consideration of own position in town small/ medium/big_____

18. Customers:

    Percentage of sales to

    Individual_____

    Firms_____

    Govt._____

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19. Percentage of sales at the unit or
firm (T.shs)_____
and at the community_____

20. Suggestions:-

(i) Would you suggest that the craftsmen of your profession in the town be incorporated in an organization Yes/No_____

(ii) Would you suggest the formation of Co-operatives Yes/No_____

(iii) Would you like to be shifted to another area in the town Yes/No_____

(iv) Would you like to get workshops or sheds for your business Yes/No_____

(v) Further suggestions_____
_____
_____

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APPENDIX B

MOROGORO URBAN

SURVEY OF MEDIUM AND LARGE INDUSTRIES

1. Name of the industry/establishment _____

2. Type of industry:

   (i) Extractive _____

   (ii) Manufacturing _____

3. Location of Industry:

   (i) Area (Sa.M) _____

   (ii) Industrial Area _____

   (iii) Elsewhere _____

4. Year of establishment _____

5. Ownerships:

   (i) Government _____

   (ii) Parastatal _____

   (iii) Limited Company _____

   (iv) Co-operatives _____

   (v) Partnership _____

   (vi) Ujamaa _____

   (vii) Sole proprietor _____

6. Employment:

Type	Number
Administration	
Technical/Skilled	
Unskilled	
Casual	_____
GRAND TOTAL	_____

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7. Major raw materials used:

No.	Item	Source	Quantity	Value	Year
1.	....	.....	.....	.....	....
2.	....	.....	.....	.....	....
3.	....	.....	.....	.....	....
4.	....	.....	.....	.....	....
5.	....	.....	.....	.....	....
6.	....	.....	.....	.....	....
7.	....	.....	.....	.....	....

8. Power Supply:

Item	Quantity	Value	Year
Coal	_____tons	_____	____
Electricity	_____kw	_____	____
Petroleum Products	_____tons	_____	_____
Firewood	_____tons	_____	_____
Charcoal	_____tons	_____	____

9. Water Supply:

Source	Disposal	Quantity	Year	Cost
_____	_____	_____	____	____
_____	_____	_____	____	____
_____	_____	_____	____	____
_____	_____	_____	_____	____

10. Marketing of products through:

Governement _____

Parastatal _____

Co-operative _____

Individuals _____

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11. Means of transport to factory by employees.

Mode	Number
Foot	.....
Bicycles	.....
Bus	.....
Truck	.....
Car	.....

12. Problems of the industry, if any:

(i) .....

(ii) .....

(iii) .....

13. Programmes of expansion, if any:

.....

.....

.....

.....

14. Period of expansion and estimated costs.

Period/Phase .....

Estimated Cost .....

APPENDIX C

MOROGORO URBAN STUDY

HOUSEHOLD SURVEY

Area .....

House No. .....

Household No. .....

Socio-economic status of individuals:

NO.	1	2	3	4	5	6	7	8	9	10	11	12
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												

*Instruction next page.

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Guidelines:

COLUMN 1:

Relationship to head of the household:

1. Head.
2. Wife.
3. Child.
4. Brother.
5. Sister.
6. Cousin.
7. Parent.
8. Other.

COLUMN 2:

Age in years.

COLUMN 3:

Marital Status:

1. Married.
2. Unmarried.
3. Widow.
4. Divorced or Separated.

COLUMN 4:

Previous Residence:

1. Morogoro Urban.
2. Morogoro Region (Rural).
3. Outside the Region.

COLUMN 5:

Length of Residence in Morogoro Urban (years).

1. Less than one year
2. 1 - 3 years.
3. 4 - 5 years.
4. 7 - 9 years.
5. 10 +.
6. Urban dweller.

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COLUMN 6:

Reasons for moving to Morogoro Urban:

1. To join parents and relatives.
2. Employment.
3. Education.
4. Starting business.
5. Non-migrant.

COLUMN 7:

Employment Status:

1. Self-employed.
2. Employed.
3. Unemployed.
4. Others.

Column 8:

Type of occupation:

1. Agriculture.
2. Extractive.
3. Manufacturing.
4. Construction.
5. Trade.
6. Service.
7. Govt. Administration.
8. Domestic.
9. Small Scale Industries.

COLUMN 9:

Skills or Experience on the job:

1. Education:
   - A. Primary.
   - B. Secondary.
   - C. University.
   - D. Vocational.
2. Experience:
   - A. Less than one year.
   - B. 1 - 3 years.
   - C. 4 - 5 years.
   - D. 7 - 9 years.
   - E. 10 + years.

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COLUMN 10:

Income per month:

1. 1 - 199.
2. 200 - 299.
3. 300 - 399.
4. 400 - 599.
5. 600 - 999.
6. 1000 +.

COLUMN 11:

Savings:

1. 1 - 150
2. 151 - 200
3. 201 - 250
4. 250 +

COLUMN 12:

Future Migration:

1. To Morogoro Rural.
2. To other regions.
3. No migration.

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APPENDIX D

MOROGORO URBAN

MARKET FOR URBAN SMALL SCALE INDUSTRIAL PRODUCTS

Area)))) _____

Form No. _____

Aim: To examine the stock of goods in common use in order to discover what goods may be in demand by households or at least needed by them.

Methods: A survey of households articles.

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ARTICLES	HOUSEHOLDS						
	1	2	3	4	5	6	7
1. Tables							
2. Chairs							
3. Stools							
4. Bedframes							
5. Shelves							
6. Cupboards							
7. Coushens							
8. Benches							
9. Pair of Shoes							
10. Mats							
11. Handbags							
12. Plates							
13. Spoons							
14. Basin							
15. Trays							
16. Stoves							
17. Pail							

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ARTICLES	HOUSEHOLDS						
	1	2	3	4	5	6	7
18. Pangas/Axe							
19. Hoe							
20. Sewing Machine							
21. Radios/Player							
22. Bicycles							
23. Vehicles							
24. Pots							

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AREA · C ·

MORRISCOPE URBAN

EXISTING & PROPOSED LAND USE:

Key

- Contours (Ft)
- Drains
- Tracks and Footpaths
- Buildings
- Small Scale Industries
- Agricultural
- Proposed Industrial Community Centre
- Proposed Neighbourhood Industrial Worksheds

9 C	scale. 1:2500	N

By S M Mghweno.
Department of Planning.
June 1967

AREA B:

MOROGORO URBAN

EXISTING & PROPOSE LAND USE

KEY

Contours (Ft)

Town Boundary

Tracks Footpaths

Buildings

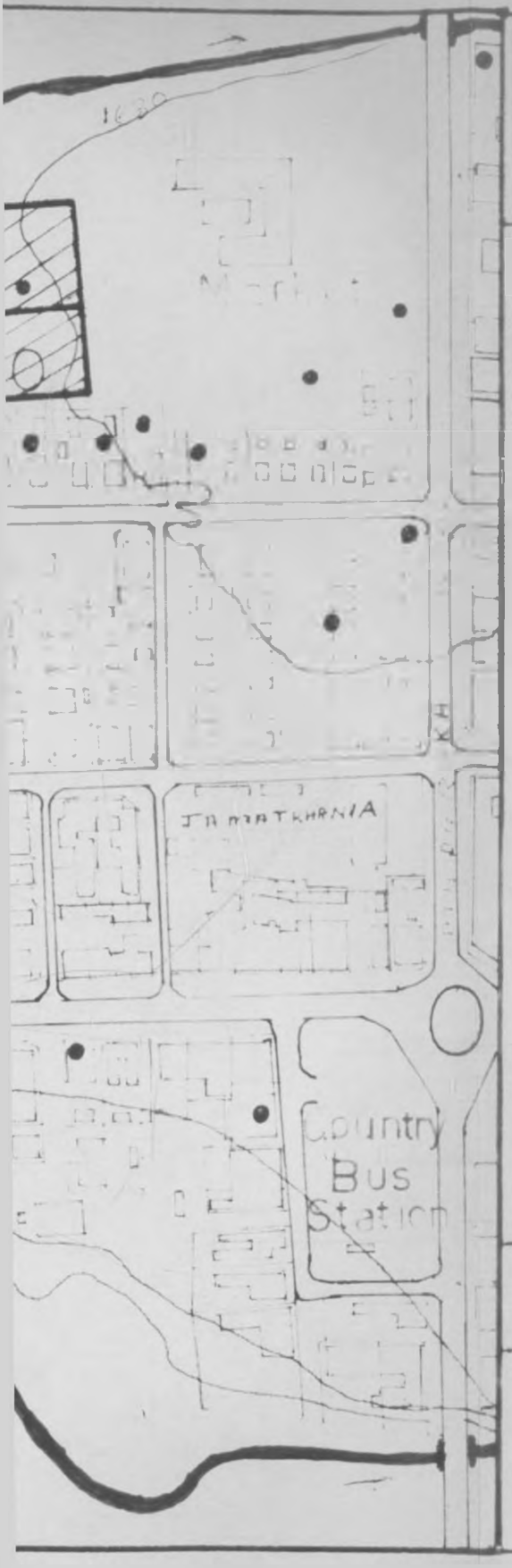
Railways

Small Scale Industries

Proposed Industrial Community Centre & Neighbourhood Industrial Centre

9 B	1:2,500	N

By S.M. Mgnweno,
Department of Planning,
June, 1977.



AREA . A:

MOROGORO URBAN

EXISTING & PROPOSED LAND USE:

KEY

- Contours (Ft)
- Buildings
- Small Scale Industries
- Proposed Industrial Community Centre
- Proposed Neighbourhood Industrial Centre

9 A	1:2,500	N

By S M Mahwenc.

Department of Planning

June 19