# INTEGRATED LABOUR FORCE SURVEY

# 2000/01

# METHODOLOGICAL REPORT

**NATIONAL BUREAU OF STATISTICS
TANZANIA**

**MINISTRY OF LABOUR, YOUTH
DEVELOPMENT AND SPORTS**

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## ABBREVIATIONS

| | |
|---|---|
| ASC IT | American Standard Code for Information Interchange |
| CENTS | Tabulation Component of the IMPS |
| CLS 1 | Child Labour Survey Questionnaire 1 |
| CLS 2 | Child Labour Survey Questionnaire 2 |
| CONCOR | Editing Component of the IMPS |
| CV | Coefficient of Variation |
| EA | Enumeration Area |
| HIPC | High Indebted Poor Countries |
| ICLS | International Conference of Labour Statisticians |
| ILFS | Integrated Labour Force Survey |
| IMPS | Integrated Microcomputer Processing Systems |
| ISIC | International Standard of Industrial Classification |
| LFS1 | Labour Force Survey Questionnaire 1 |
| LFS2 | Labour Force Survey Questionnaire 2 |
| MANTEP | Management Training of Education Personnel |
| MODULA | A National Master Sample which can produce Urban and Rural Estimates at National Level |
| MOLYDS | Ministry of Labour, Youth Development and Sports |
| MS EXCEL | Microsoft Excel |
| NMS | National Mater Sample |
| PC's | Personal Computers |
| PSU's | Primary Sampling Units |
| QUICKTAB | Tabulation Component of the IMPS |
| SPSS | Statistical Package for the Social Sciences |
| TASCO | National Standard of Occupation |

# FOREWORD

The 2000/01 Integrated Labour Force Survey (ILFS) of Mainland Tanzania is similar to the Labour Force Survey of 1990/91 except that in the 2000/01 survey additional information has been sought on child labour.

This volume deals with the methodology employed during the 2000/01 ILFS. It is the first in series of the two volumes, the second of which is the Analytical Report. The purpose of publishing this report is to explain in detail the methods employed in conducting the inquiry, so as to assist the interpretation of the published ILFS results. The limitation of the methods used can then also be understood.

The volume represents combined efforts of members of staff of the Labour and Price Department of the National Bureau of Statistics as well as those from the Ministry of Labour, Youth Development and Sports and the President's Office, Planning and Privatization.

As in previous surveys, the National Bureau of Statistics is fully responsible for the 2000/01 survey. However, its success depended on the cooperation and contribution of several organizations and individuals during the various stages of implementation.

In undertaking a project like the ILFS many organizations are involved at one stage or another. It is impossible to mention all of them individually. However, special thanks should go to the members of the ILFS Steering Committee under the chairpersonship of the Permanent Secretary Ministry of Labour, Youth Development and Sports as well as members of the Technical Committee. The two Committees helped in the review of the objectives of the survey, initial drafts of questionnaires and the tabulation plans.

Last but not least, many thanks should go to Danish International Development Agency (DANIDA) and International Labour Organisation (ILO) for financing the ILFS as well as their varied technical contributions towards this project.

**Cletus. P.B. Mkai**

September, 2001                                        **Director General**

**Chapter One**

**INTRODUCTION, CONCEPTS AND BACKGROUND**

## 1.0    Introduction

Statistical data are needed for planning activities, assessing performance, tracing patterns, establishing scientific relationships, etc. A Labour Force Survey is one means of providing such required data. Labour Force Surveys are intended to collect, compile and analyze numerical information on the labour market. From this information it is possible to assess the impact of various policies on the economic activities of the people and consequently identify the most vulnerable groups of the population.

## 1.1    Objectives Of The ILFS

The broad objective of the Integrated Labour Force Survey is to obtain comprehensive data on the current status of National Labour Market. Broadly the survey provides base line data on the socio-economic characteristics of the labour force, informal sector activities and activities of the child population in National for use in planning, policy implementation, monitoring and evaluation of government programmes aimed at improving the livelihood of the population and status of children.

The specific objectives are as follows:

(i)      To measure the extent of unemployment and underemployment in the country
(ii)     To provide measures of both current and usual economic activities
(iii)    To obtain a measure of the size of employment in the informal sector
(iv)     To provide a measure of cash income from non- agricultural employment of all types
(v)      To collect information on the character, nature, size and reasons for having child labour in Tanzania, and to determine conditions of work and their effects on the normal development of working children
(vi)     Create a Database on Child Labour in the country which will be updated as fresh statistical information becomes available through surveys and administrative records
(vii)    To identify and measure changes that have taken place since the last survey.

## 1.2    Historical Background

Labour Force Survey (LFS) in National dates back to 1965 when the first survey was conducted through support by Ford Foundation to the Government of the United Republic of National. Only Mainland Tanzania was covered. The aim of the survey was to provide benchmark data, both qualitative and quantitative, on some of the characteristics of the labour supply with a view of formulating Government's training and employment policies geared to self sufficiency in manpower by the year 1970.

In 1990/91 the Government conducted the second Labour Force Survey in order to respond to the persistent need for the labour market information. The coverage was Mainland Tanzania.

The 2000/01 Integrated Labour Force Survey (ILFS) is the first comprehensive integrated survey of its kind since independence. The survey is comprised of three modules: the general Labour Force, Child Labour and Informal Sector. The National Bureau of Statistics (NBS) was contracted by the Ministry of Labour, Youth Development and Sports (MOLYDS) to conduct the survey. Initial preparations for the survey started in January 2000 and the memorandum of understanding (MOU) between the NBS and MOLYDS was signed in April 2000. The coverage was also Mainland Tanzania.

**Chapter Two**

**SCOPE, COVERAGE AND DEFINITIONS**

**2.0      Major conceptual and definitional issues**

**2.1      Scope**

By scope, we mean the description of the part of the total population of Mainland Tanzania that was covered by the survey. The 2000/01 Integrated Labour Force Survey covers private households only as there was no sampling frame for the institutional population.

**2.2      Age Limit**

For the 2000/01 ILFS the lower age limit was five years, because of the growing interest in the activities of the population in the 5 to 17 years age bracket. For persons less than 5 years only age and sex were asked. For persons 5 years and above a number of demographic and economic questions were asked.

Special questionnaires CLS1 and CLS2 were designed and used for the first time to capture information on the children's economic and non-economic activities, working conditions, safety and heath as well as reasons for child labour.

**2.3      Coverage rule**

A de – jure approach was used during data collection that is all persons who usually live in the selected household were interviewed. The aim was to include all usual residents unlike the other approach (de – facto), which excludes usual residents who are temporarily absent and only includes all persons who slept in the selected household the night before the interview.

The following guidelines were to be used by interviewers to identify usual residents.

i.   All persons listed as usual residents of the selected household were included if they had been there at any time in the last 3 months
ii.  All persons who had no usual residence or had usual residence but had not been there in the last 3 months were excluded
iii. All usual residents who had not been at the selected household in the last 3 months were excluded

iv. All visitors who had usual residence elsewhere (including institutions) and who had been there at some time in the last 3 months were excluded.

## 2.4 Household and Head of Household

### 2.4.1 Household

A household is that group of persons who live and eat together and share common living arrangements. It usually consists of a husband, wife and their children. It can also include other persons, relatives and domestic servants provided they live together and eat most meals together.

A household can consist of one person or more. A single person household exists if that person lives by himself/ herself and normally cooks and eats by himself/herself.

A household can be different from a family group. If two families live together e.g. husband, wife and children and married son (or brother) and his wife and children, and regularly the two families eat together then they are one household. A household is not necessarily the same as a dwelling. A dwelling or a house can contain one or more households. Example – a large house with four separate households, who cook separately, usually eat separately and rent their rooms in the house individually. Conversely a household could live in more than one dwelling. If the occupants of the separate dwellings regularly eat together, then they form one household. This arrangement is more common in rural than in urban areas.

A domestic servant would only be a member of a household where he/she works, if he/she sleeps and eats most of the time with that household. If he/she returns to his/her own separate dwelling at night where his/her own family is and he/she also eats separately there, then he/she would not be part of the household where he/she works.

Special care should be taken with polygamous relationships. Wives can form separate households and husband should be associated with the wife where he spends most time.

### 2.4.2 Head of household

The head of household is normally the person who the household members recognize as the head of that household. Where there are any or doubts a person who owns the house or is responsible for the rent or is otherwise responsible for the economic/social welfare of the household is taken as the head. Similar definition has been used in other data collection surveys in National so as to facilitate the comparison of survey results.

**2.5     Household Economic Questions**

It was decided to include a few questions on the household economic activities at the back of LFS1 questionnaire; this was done because economic activities are often done on a household basis rather than on an individual basis.

The inclusion of these questions was meant**:**

(i)  To provide an introduction to the economic questions coming later in the questionnaire as respondents tend to be more relaxed talking generally about household activities before settling into the detailed individual questions.

(ii) To provide a check on the individual questions. Any household economic activity should normally be recorded as a main or secondary activity for at least one person in the household. This check was to be done by interviewers, supervisors and office staff when editing.

(iii)To provide a few simple tabulations from the answers which can be very useful for studying the social and economic well being at household level.

(iv)The question for households engaged in agriculture, on whether they had any paid employee, was included in LFS1 but not in the individual questionnaire, to avoid double counting of farm labourers from responses of the individual household members.

**2.6     Literacy, School Attendance, Education Level and Training**

**2.6.1   Literacy**

Literacy was measured through a simple question on whether the person could or could not read and write simple sentences in Kiswahili, English, or any other language.

**2.6.2   School Attendance**

A question on school attendance was asked to know if the person was attending school, completed or never attended school.

**2.6.3   Education level**

Current level completed was measured. For persons studying, the level reached at the end of the previous academic year was recorded.

### 2.6.4   Training

This was recorded if the course was for at least one-month duration.  If a person had several post school qualifications, he/she was to decide which was the most important. The training did not have to be relevant to the person's current job.

### 2.7      Survey period

It was decided to conduct the survey over a year on quarterly basis. Spreading the ILFS over a year had operational advantages, as it was possible to send forms back to the field for corrections while fieldwork was still in progress. Problems in interpretation could also be conveniently solved. This happened several times and it was very useful for data quality control to have field staff continuing with the survey.   However, there are problems in interpretation of the data. The current activity data does not refer to any fixed time period during the year and it is definitely wrong to say it refers to the middle of the survey year. It should be taken as a measure of the average economic activity throughout the twelve months. "On and Off" agricultural seasons are represented in the data. The sample was distributed approximately equally to the four quarters of the year. It was thus possible to produce survey estimates for each of the four quarters. Although, sample numbers were relatively small in each quarter, quarterly estimates that were obtained were fairly close indicating a high degree of accuracy of the sampling scheme.

**Chapter Three**

**LABOUR FORCE CONCEPTS**

## 3.0    Major Economic Activity Concepts

The conceptual basis of the Integrated Labour Force Survey was the international recommendations concerning the economically active population as adopted by the 13$^{th}$ International Conference of Labour Statisticians (ICLS) in 1987. This was to ensure that LFS results conform to the overall framework of economic statistics. However, owing to peculiarities pertaining to developing countries and particularly Tanzania, parallel results based on National's own perceptions have also been produced.

## 3.1    Economically Active Population

This is the key concept of the survey and, in general, it was decided to adopt the widest internationally recommended definition. Economically active persons are those who supply labour for the production of goods and services for the markets barter or for home consumption as defined in the United Nations System of National Accounts. The production boundary is very wide under this system and includes paid employment and a wide range of self employed activities but excludes unpaid domestic activities such as child care, cooking food for own family, etc. A long list of activities was drawn up and put on the first page of the questionnaire, for reference in regard to both the first question (usual activity) and question six (current activity). As a result of widening the scope of economic activities participation rates (particularly for women) are higher than in earlier surveys which use a more restricted concept. The adoption of a wider definition for an economic activity has for the first time resulted in the inclusion of the **fetching of water** and **collection of firewood for home consumption** among economic activities.

## 3.2    Current Economic Activity

International Recommendations allow the use of any recent short period e.g. a day, a week as the reference period. For the ILFS it was decided to use the previous calendar week (Monday to Sunday) from the date of the interview. Currently Economically Active (The Labour Force), are persons who were either employed or unemployed (as defined below) in the reference week.

### 3.2.1   Usual Economic Activity

One of the major early decisions was to measure both usual and current economic activities, as internationally recommended. It was thought that these two measures would take care of seasonal activities and this proved correct. It was decided to use the twelve calendar months up to the end of the calendar month preceding the date of the interview for the survey, as the reference period. Any usual economic activity was one that took more than 1 hour a week or half a day a month.

### 3.2.2   Employed Persons

Are those who did some work in the reference period, either for payment in cash or kind (paid employees), or those who were in self-employment for profit or family gain. Also persons temporarily absent from these activities but definitely going to return to them, for example, those on leave or sick were included in this group. This is based on the standard international concept of employment. On the other hand in National a person is considered employed only if work done was continuing over a period of time (sustainable). Persons who did not have continuing work over a period of time were considered to be unemployed.

### 3.2.3   Self – employed Persons

This includes the large number of persons working on their own farms or shambas as well as unpaid family workers who did some work in family businesses. Some work was defined as working for one hour or more in the reference week. It should be noted that any economic work took priority over all other activities. In Tanzania the concept excludes all persons who declare they do not have sustainable/continuing work from self-employed.

### 3.2.4   Unemployed Persons

These are the persons who were not employed as defined above and who stated that they were available for work. In the Tanzania concept, persons who declare their work as non-continuous are included here.

It was decided not to restrict the "unemployment status" to persons actively seeking for work. The Tanzania Labour Market is largely unorganized. There is only one official Labour Exchange for the whole country. Under these circumstances it is often useless to actively seek for work. It was decided to ask additional questions and produce the subsets of the unemployed as given below i.e. A – available and actively seeking for work; B – available but not actively seeking for work. Concept A is mostly applicable in urban areas. It was

decided to use four weeks as the limit for actively seeking for work as it is a reasonably short period but also allows time, given the state of the labour market.

### 3.2.5   Currently not Economically Active (Not in the Labour force)

These are persons who were neither employed nor unemployed in the reference period. This includes persons doing solely unpaid domestic work in their own houses, studying or persons not working because they were sick or retired. Note that persons with these activities are included as economically active if they did any economic activity as defined above, in the reference period.

### 3.2.6   Underemployed Persons

Underemployed persons by hours are persons who worked less than 40 hours in the reference week for an economic reason (i.e. excluding those on leave, at school and similar non-economic reasons) and who said they were available for more work. In National the concept considered as underemployed only those persons who worked for less than 40 hours in the work that was continuous or sustainable.

It was decided to use a fixed limit of 40 hours as the boundary for underemployment as this is the most common minimum working hours per week in National. It was decided that variable working hours by occupation or industry would be too complex to measure even if derived during computer data processing.

### 3.2.7   Unemployed A

Are persons currently unemployed who were not only available for work but had taken active steps to find work in the last four weeks.

### 3.2.8   Unemployed B

Are persons currently unemployed who had not taken active steps to find work but were available for work in the last four weeks.

### 3.2.9   Unemployed C

Refers to persons who did some work during the reference week but their work was not reliable with regard to its availability and adequacy in terms of hours.  Also included are persons who were temporarily absent from their work during the reference period with reasons " can't find work or no suitable land for cultivation or because of off-season".
The following issues were particularly discussed in the working group:

### 3.2.10  Temporary Absences from Employment

There are two aspects to this issue:

(i) Persons not working in the reference period but have work from which they are temporarily absent are included in the employed population provided they keep a strong attachment to the job and there is a definite expectation they will return to it. The most common categories are persons on leave. However, stand – downs do occur in National with the operating problems of many factories. The problem was to put a time limit on such absences within which a person can be considered to be employed. For wage earners the limit was set at four months.

For self employed the application of the concept was more difficult. It was decided that for a self – employed to be considered temporary absent his/her business must continue to operate in his/her absence e.g. through spouse or relative. A limit for this group was taken to be one month. Formal leave is rare for self-employed – particularly small operators. Un-paid helpers and casual workers cannot be temporarily absent from work as they have no measurable attachment to the job. It was appropriate to call such persons not economically active or unemployed as appropriate during such absences. Such persons will have zero hours worked. In a few rare cases we allowed temporarily absent from both main and secondary activity. As noted later in the data evaluation sections, the number of temporarily absent from agriculture was disturbingly high and needs further investigation on its causes.

(ii) Persons working in the reference period but not at their main activity. The common example was public servant working on his shamba while on leave. These persons were causing problems for main (Q17 – Q22) and other (Q34 – Q40) economic activities. Such situations are quite common in National compared to developed countries. Most wage earners have to work while on leave because of the economic circumstances. It was decided to insert a special question 7(b) to cover this problem. For those who were temporarily absent from their usual main activity (Q17 – Q22) and have current activity will be recorded as other activities (Q34 –Q40). The same period limits apply as (i) above. The current time worked for main activity was recorded as zero.

### 3.2.11  Employment

**Current and secondary activity:** For employed persons details were collected on the persons' main economic activity plus any one secondary activity. Generally, activities of the same status and the same industry group were combined as one activity. For example, a

person growing maize and growing food crops. However, if the industry was the same but status differed they were recorded as two activities. The main activity was the one that took the most time irrespective of income earned.

### 3.2.12  Major Classifications used

The following major classifications were used for the ILFS
- (i)      Status in Employment
- (ii)     Sector of Employment
- (iii)    Occupation of Employment
- (iv)    Industry of Employment
- (v)     Subject of Training

The first four classifications were used for each currently employed person in regard to his/her main activity as well as his/her secondary activity. Occupation codes ware also used for the unemployed in regard to their previous job. The subject of training classification was applied for
all persons with any training of at least one month's duration. Each classification is explained below.

### 3.2.13  Paid Employees

Are persons who during the reference week performed some work for wage or salary in cash or kind or were temporarily absent from such work for not more than 4 months. Included are permanent, temporary and casual paid employees.

### 3.2.14  Self-employed (non traditional agriculture)

Are persons who during the reference week performed some work for profit or family gain in their own non-agricultural enterprise or were temporarily absent from such work for not more than one month. This includes small and large business persons working on their own enterprises. The category was sub- divided into those with employees and those without employees.

### 3.2.15  Unpaid Family Helpers (non-traditional agriculture)

These are persons working completely without payments in cash or kind in family enterprises other than in the family farm or shamba.

### 3.2.16 Traditional Agriculture Workers

Are persons working on their own farms or shambas either in agriculture, livestock or fishing as either self-employed persons or as unpaid family helpers. The major variation from the international classification of status in employment is the provision of the special category for traditional agriculture workers. In the International Classification, these are combined with the self-employed. However, it was decided that the separate category was very desirable for the ILFS as non- agricultural self-employed can be lost in dominant agricultural group.

### 3.2.17 Sector of Employment

Refers to the enterprise/establishment where an employee works.

Coding of sectors of employment was done according to the following categories:

(i)      Government (Central/Local)
(ii)     Parastatal
(iii)    Traditional Agriculture
(iv)    Informal Sector
(v)     Household duties
(vi)    Other Private

### 3.2.18 Government

Includes persons working for central or local Government Departments.

### 3.2.19 Parastatal Enterprises

Include a wide range of enterprises owned at least 50 percent by some branch of the Government, either profit making or non- profit making.

### 3.2.20 Traditional Agriculture

Includes all persons who stated that they were working on their own or family shambas either in agriculture, livestock or fishing or as paid employees on similar establishments.

### 3.2.21 Informal Sector

An attempt was made to identify this group through a series of questions. The definition is explained in section 3.2.26.

### 3.2.22  Other Private

This includes persons working for other enterprises not included above. This is often broadly called the Private Formal Sector. The major innovation is the identification of the informal sector. This classification has proved extremely useful and is widely used in analysis. For usual activity, the informal sector group is not available and has been combined with other private household duties.

### 3.2.23  Occupation of Employment

This refers to the type of work done during the reference period by the person employed or the kind of work done previously for the unemployed person, irrespective of the industry or status in the employment of the person. Information on occupation provides descriptions of somebody's tasks and duties, which are carried out by him or her. For the 2000/01 Integrated Labour Force Survey, the National Standard of Occupation (TASCO) was applied. Copies of this classification are available at the Labour Statistics Unit of  the Ministry of Labour, Youth Development and Sports.

### 3.2.24  Industry of Employment

The term industry is used to refer to the activity of the establishment in which an employed person worked during the survey reference period, or last worked if unemployed. This activity is defined in terms of the kind of goods produced or services supplied by the unit in which the person works. The branch of economic activity of a person depends on the characteristics of the economic unit in which he/she works.

A Tanzanian adaptation of the International Standard Industrial Classification (ISIC) was applied. Additional codes were particularly added to identify informal sector activities.

 Copies of the classification are available at the Labour Statistics Unit of the Ministry of Labour, Youth Development and Sports and the National Bureau of Statistics.

### 3.2.25  Subject of Training

A special subject of training classification was applied. It is a Tanzanian adaptation of a similar classification used for the 1990/91 Labour Force Survey. Copies are available at the (NBS) Labour Statistics Unit.

### 3.2.26  Identification of the Informal Sector

One of the three modules of the 2000/01 Integrated Labour Force Survey was the Informal Sector Survey. This component tried to identify the industries of the main and secondary activities and each activity was classified as being informal if it satisfied the characteristics set for each industry.

The main characteristics of the informal sector are the following:

(a)    The informal sector is considered as a subset of household enterprises or unincorporated enterprises owned by households.

- They are enterprises which are not separate legal entities independent of the households or household members who own them;
- They do not have a complete set of accounts which permit a clear distinction of production activities of the enterprises from the other activities of their owners and the identification of flows of income and capital between enterprises and owners;
- The enterprises may or may not employ paid labour and the activities may be carried out inside or outside the owners' home
- All or at least some of the goods or services of the business have to be produced for sale.

(b)    The Informal Sector comprises informal own account enterprises as well as enterprises of informal employers. The distinction between own account enterprises and enterprises of informal employers is based on whether or not the enterprises of informal employers employ workers on a continuous basis as contrasted with the employment of employees on an occasional basis and the employment of unpaid family helpers.

   (c) Enterprises rendering professional or business services (e.g. doctors, teachers, lawyers etc) are included in the definition if they meet the requirements of informal own account enterprises or informal employers.

Like in 1990/91, this survey has included urban agriculture, livestock keeping and fishing in the definition to enable data comparison of the two surveys.

The working definition for the 2000/01 Survey slightly differs from the one used in 1990/91 in that while in the former survey all informal sector activities had to have a maximum of five paid employees, in the last survey, the number of paid employees in the construction, manufacturing and mining sectors was raised to a maximum of 10 paid employees. The remaining sectors had a maximum of five paid employees, like in 1990/91.

**Chapter Four**

**SURVEY METHODOLOGY AND ESTIMATION PROCEDURES**

### 4.0 Design of the Sample and Estimation

The Integrated Labour Force Survey used the existing National Master Sample (NMS) consisting of 100 villages representing rural areas and 122 urban enumeration areas (EAs) distributed throughout the country. The NMS is a generalized set of area units that can be used as PSUs for conducting various household surveys. It is a fixed sample of rural and urban clusters, which, among other things, makes it possible for the performance of a continuous survey prograsmme as well as ad hoc sample surveys. The urban enumeration areas are distributed as follows: 52 EAs are from the city of Dar es salaam, 32 EAs from the 8 Municipalities of Dodoma, Arusha, Moshi, Tanga, Morogoro, Iringa, Mbeya, Tabora and 8 from Mwanza city. Ten EAs from remaining regional headquarters (1 EA each from Kibaha, Lindi, Mtwara, Songea, Sumbawanga, Kigoma, Singida, Shinyanga, Bukoba and Musoma). The remaining twenty (20) EAs were from district headquarters and other small towns.

### 4.1 Frame of the Sample

The sampling frame for the current NMS is based on the preliminary results of the 1988 population census. For the 2000/01 ILFS the primary sampling unit (PSU) was the village for the rural and EA for urban areas respectively. A probability proportional to size without replacement (ppswor) – systematic sampling procedure was used for the selection of PSU. About two months before the commencement of the field work a household listing exercise was done from mid February 2000 to mid March 2000 on the NMS clusters taking about two weeks. All households within each cluster were listed. The household listings gave the sampling frame of households for each cluster.

All listed sample clusters were sent to the NBS headquarters for household selection. The lists of households were aggregated into three sizes of household members.

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## 4.2    Sample Size

### *(a)    Rural sample*
For the rural sample two villages were selected from each of the 50 super strata. This gave a total of 100 villages. From each selected village a sample of 80 households was drawn and for each household size the following allocation was done:

**Table 4.1:   Rural Sample: Selected Households According to Household Size**

| Household size | Selected households |
|---|---|
| 1 – 4 | 26 |
| 5 – 7 | 27 |
| 8+ | 27 |
| **Total** | **80** |

The allocation was 20 households per quarter. This was done by dividing each group of household size by 4 to get the number of households to be interviewed per household size for each quarter, and this depended on the number of households per household size.

### *(b)    Urban sample*
A total of 122 urban enumeration areas were selected using systematic sampling procedure. The EAs were then allocated per income level as follows;

| | | |
|---|---|---|
| High income EAs ( clusters) | - | 35 households |
| Middle income clusters | - | 33 households |
| Low income clusters | - | 30 households |

The allocation of EAs per income level was further subdivided into household sizes as follows:

**Table 4.2:    Urban Sample: Selected Households According to Household Size and Income Level**

| Household size | Selected households per income level | | | Total |
| --- | --- | --- | --- | --- |
| | High | Middle | Low | |
| 1 - 4 | 10 | 10 | 10 | 30 |
| 5 - 7 | 10 | 10 | 10 | 30 |
| 8+ | 15 | 13 | 10 | 38 |
| Total | 35 | 33 | 30 | 98 |

These allocations of households per household size were then distributed within the four quarters.

**Table 4.3: Rural and Urban Sample: Distribution of Selected Villages and EAs By Region**

| Region | AREA | | Total |
| --- | --- | --- | --- |
| | Rural | Urban | |
| Dodoma | 6 | 4 | 10 |
| Arusha | 6 | 5 | 11 |
| Kilimanjaro | 5 | 6 | 11 |
| Tanga | 6 | 7 | 13 |
| Morogoro | 5 | 5 | 10 |
| Pwani | 3 | 3 | 6 |
| Dar Es salaam | - | 52 | 52 |
| Lindi | 3 | 2 | 5 |
| Mtwara | 5 | 2 | 7 |
| Ruvuma | 3 | 2 | 5 |
| Iringa | 6 | 5 | 11 |
| Mbeya | 7 | 6 | 13 |
| Singida | 4 | 2 | 6 |
| Tabora | 5 | 4 | 9 |
| Rukwa | 3 | 2 | 5 |
| Kigoma | 4 | 1 | 5 |
| Shinyanga | 8 | 3 | 11 |
| Kagera | 8 | 1 | 9 |
| Mwanza | 8 | 8 | 16 |
| Mara | 5 | 2 | 7 |
| Total | 100 | 122 | 222 |

*( c )     Distribution of sampled villages and EAs*

The above selection procedures give the following distribution of selected villages and enumeration areas for the urban and rural samples (table 4.3).

## 4.3     Estimation Procedure

The sampling procedure for both the urban and rural samples suggests good estimates at national, and cluster levels. Regional estimates can also be worked out. For urban sample it is possible to get estimates for the three domains of study, i.e. Dar Es Salaam city, nine municipalities and other towns. Estimation of individual towns and households' sizes can also be obtained by some imputation methods.

### 4.3.1   Rural Areas

This section gives expressions for estimation of population totals for different study variables in rural areas.

**4.3.1.1 Notations**

The following notations are used:

$V_h$ = Number of sampled PSUs (villages) in stratum h, where h = 1,. . . . , 50

$V_r$ = Number of sampled PSUs (villages) in region r, where r = 1,. . . . , 20

$N_{hi}$ = Number of households in i – th village of h – th stratum

$N_{ri}$ = Number of households in i – th village of the r – th region

$N_{hij}$ = Number of households in the j – th household size , i – th village and h – th stratum

$N_{rij}$ = Number of households in the j – th household size , i – th village and r – th region

$M_h$ = Size measure of the h – th stratum.

$M_r$ = Size measure of the r – th region.

$M_{hi}$ = Size measure of the i – th PSU (village) in the h – th stratum.

$M_{ri}$ = Size measure of the i – th PSU ( village) in the r – th region

$M_{hij}$ = Size measure of the j – th household size , i – th village and h – stratum.

$M_{rij}$ = Size measure of the the j – th household size , i – th village and r – region.

$y_{hijk}$ = The observation of variable y in the k – th household of size j in the village i of stratum h.

$y_{rijk}$ = The observation of variable y in the k – th household of size j in the village i of region r

**4.3.1.2.        Outline of the Selection Procedure**

The sampling design is stratified two stage sample with the following selection procedures:

  i.    A sample of vh PSUs (villages) within the h – th stratum   is selected using pps without replacement sampling method where size measure is $M_h$.
  ii.   A sample of $n_{hi}$  households within the i – selected village in h – th stratum is selected using systematic random sampling from $N_{hi}$ households from village hi.
  iii.  A sample of $n_{hij}$ households of size j in the i – th selected village in the h – th stratum is selected using systematic random sampling from $N_{hij}$ households of size j in the village hi.

**\* For regional estimation we will assume the following selection procedures:**

   iv.    A sample of $v_r$ PSUs (village) within the r – th region is selected using pps and without replacement sampling method where the size measure is $M_r$.

   v.    A sample of $n_{ri}$ households within the i – th selected village in the r – th region is selected using systematic random sampling from $N_{ri}$ households in village ri.

   vi.    A sample of $n_{rij}$ households of size j in the i – th selected village of the r – th region from $N_{rij}$ households of size j in village ri.

**\* Note that the above procedures were not followed but can be implied from the fact that strata were defined within the boundaries of the region.**

### 4.3.1.3.      Estimation of Population Totals

(1)      Household size estimate

(a)      Estimate of total of variable y for the household size j in village hi

$$\hat{Y}_{hij} = \frac{N_{hij}}{n_{hij}} \sum_{k}^{n_{hij}} y_{hijk} \qquad \dots \quad (1)$$

with estimate of variance given by

$$\hat{V}(\hat{Y}_{hij}) = \frac{N_{hij}(N_{hij} - n_{hij})}{n_{hij}(n_{hij} - 1)} \sum_{k}^{n_{hij}} (y_{hijk} - \bar{y}_{hij})^2 \qquad \dots \quad (2)$$

where $\bar{y}_{hij} = \dfrac{1}{n_{hij}} \sum_{k}^{n_{hij}} y_{hijk}$      is the estimate of the mean in household size j of village hi

(b)      Estimate of total of variance Y for household size j in village ri

$$\hat{Y}_{rij} = \frac{N_{rij}}{n_{rij}} \sum_{k}^{n_{rij}} y_{rijk} \qquad \dots \quad (3)$$

with estimate of variance obtained from

$$\hat{V}(\hat{Y}_j) = \frac{N_{rij}(N_{rij} - n_{rij})}{n_{rij}(n_{rij} - 1)} \sum_{k}^{n_{rij}} (y_{rijk} - \bar{y}_{rij})^2 \qquad \dots \quad (4)$$

where $\bar{y}_{rij} = \dfrac{1}{n_{rij}} \sum_{k}^{n_{rij}} y_{rijk}$ is the estimate of the mean in household size j of village ri

(2) Village estimate

    (a) Estimate of total of variable y for the village hi is obtained by

$$\hat{Y}_{hi} = \frac{N_{hi}}{n_{hi}} \sum_{j}^{n_{hi}} \hat{y}_{hij} \qquad \dots \quad (5)$$

with estimate of variance given by

$$\hat{V}(\hat{Y}_{hi}) = \frac{N_{hi}(N_{hi} - n_{hi})}{n_{hi}(n_{hi} - 1)} \sum_{j}^{n_{hij}} (\hat{y}_{rijk} - \bar{y}_{rij})^2 \qquad \dots \quad (6)$$

Where $\bar{y}_{hi} = \frac{1}{n_{hi}} \sum_{j}^{n_{hi}} \hat{y}_{hij}$ is the estimate of the mean in village hi.

    (b) Estimate of total of variable y for the village ri is obtained by

$$\hat{Y}_{ri} = \frac{N_{ri}}{n_{ri}} \sum_{j}^{n_{rj}} \hat{y}_{rij} \qquad \dots \quad (7)$$

with estimate of variance given by

$$\hat{V}(\hat{Y}_{ri}) = \frac{N_{ri}(N_{ri} - n_{ri})}{n_{ri}(n_{ri} - 1)} \sum_{j}^{n_{rij}} (\hat{y}_{rij} - \bar{y}_{ri})^2 \qquad \dots \quad (8)$$

where $\bar{y}_{ri} = \frac{1}{n_{ri}} \sum_{j}^{n_{rij}} y_{rij}$ is the estimate of the mean in village ri

(3)    The stratum estimate

$$\hat{Y}_{h} = \frac{1}{V_h} \sum_{i}^{v_h} \frac{M_h}{M_{hi}} \hat{Y}_{hi} \qquad \dots \quad (9)$$

with estimate of variance

$$\hat{V}(\hat{Y}_{h}) = \frac{1}{v_h(v_h - 1)} [\sum_{i}^{v_h} \frac{M_h^2}{M_{hi}^2} \hat{Y}_{hi}^2 - v_h \hat{Y}_{h}^2] \qquad \dots \quad (10)$$

(4)    Regional estimate

$$\hat{Y}_r = \frac{1}{V_r}\sum_{i}^{v_r}\frac{M_r}{M_{ri}}\hat{Y}_{ri}$$    …    (11)

with estimate of variance given by

$$\hat{V}(\hat{Y}_r) = \frac{1}{v_r(v_r-1)}[\sum_{i}^{v_r}\frac{M_r^2}{M_{ri}^2}\hat{Y}_r^2 - v_r\hat{Y}_r^2]$$    …    (12)

(5)    National estimate

$$\hat{Y} = \sum_{h}^{L}\hat{Y}_h \qquad \text{or} \qquad \hat{Y} = \sum_{r}^{R}\hat{Y}_r$$    …    (13)

An estimate of total of Y from stratum is then

$$\hat{Y} = \sum_{h}^{50}\frac{1}{v_h}M_h\sum_{i}^{v_h}\frac{1}{M_{hi}}\cdot\frac{N_{hi}}{n_{hi}}\sum_{j}^{n_{hi}}\frac{N_{hi}}{n_{hij}}\sum_{k}^{n_{hij}}y_{hijk}$$    …    (14)

An estimate of total of y from region is then

$$\hat{Y} = \sum_{r_i}^{R}\frac{1}{u_r}M_r\sum_{i}^{u_r}\frac{1}{M_{ri}}\cdot\frac{N_{ri}}{n_{ri}}\sum_{j}^{n_{ri}}\frac{N_{ri}}{n_{rij}}\sum_{k}^{n_{rij}}y_{rijk}$$    …    (15)

Estimate of variance is given by

$$\hat{V}(\hat{Y}) = \sum_{h}^{L}\hat{V}(\hat{Y}_h) \qquad \text{or} \qquad \hat{V}(\hat{Y}) = \sum_{r}^{R}\hat{V}(\hat{Y}_r)$$    …    (16)

Where L is number of strata and R number of regions

### 4.3.2   Urban Areas

### 4.3.2.2.    Selection Procedures

The sampling design is stratified two stages with the following selection procedure:

The selection of EAs was done using the census  - sample of EAs used in detailed question as the sampling frame. Systematic random sampling procedure was used to draw the sample. For Dar Es Salaam city, the 154 ($A_{dh}$) EAs for the detailed questionnaire in the census were ordered in the three economic level strata. A systematic random sample of 52 ($a_{dh}$) EAs was then drawn.

For the nine municipalities the 435 ($A_{nh}$) EAs, which were selected in the detailed questionnaire of census, were ordered in the three economic level strata. A systematic sample of 40 ($a_{nh}$) EAs was drawn. In the other remaining 10 regional headquarters a systematic random sample of 10 ($a_{rh}$) EAs was selected from the 485 ($A_{rh}$) EAs selected in the census. Selection of the EAs in the other urban areas was done by drawing 30 ($a_{oh}$) EAs out of about 1900 ($A_{oh}$) EAs used for the detailed questionnaire in these areas.

From the selected EAs in all the strata a simple random sample of households was then drawn without replacement.

Let $Y_{hij}$ be the observation on variable y for the j – th household of the i – th EA in stratum h.

## 4.3.2.2.    EA Estimate

Estimate of the total for EA hi is given by

$$\hat{Y}_{hi} = \sum_j \frac{N_{hi}}{n_{hi}} y_{hij} \qquad \text{....} \quad (17)$$

Where $N_{hi}$ = Number of households in the i – th EA of the h - th stratum

$n_{hi}$  = Number of sampled households in EA hi.

## 4.3.2.3    Stratum Estimate

**Estimate of total for stratum h is obtained by**

$$\hat{Y}_h = \sum_i \sum_j w_{hi} y_{hij} \qquad \text{...} \quad (18)$$

Where $w_{hk} = \dfrac{\sum\limits_h \dfrac{V_k}{A_{hk}} x N_h}{\sum\limits_h \dfrac{V_h}{A_{hk}} x n_h} \, x \, \dfrac{\sum\limits_h A_{hk}}{a_k}$

$V_h$  = Number of EAs that falls into census stratum h;

$N_h$  = Number of EAs in census stratum h

$n_h$   = Number of sampled EAs in census stratum h

$A_{hk}$  =  Number of EAs in census stratum h and NMS stratum k.

$a_k$    = Number of sampled EAs in NMS stratum k.

$V_h/A_{hk}$    = **Proportion of the sample that falls into census stratum h to the selection interval.**

### 4.3.3 National Estimate

**Estimate of total is given by**

$$\hat{Y} = \sum_{h}^{L} \hat{Y}_h \qquad\qquad \dots \qquad (19)$$

### 4.3.4 Alternative estimation procedure for rural areas

If we disregard stratification by household sizes the national estimate of the total of Y is

$$\hat{Y} = \sum_{h}^{50} \frac{1}{v_h} M_h \sum_{i}^{v_h} \frac{1}{M_{hi}} \cdot \frac{N_{hi}}{n_{hi}} \sum_{j}^{n_{hi}} \frac{N_{hi}}{n_{hij}} \sum_{k}^{n_{hij}} y_{hijk} \qquad\qquad \dots \qquad (20)$$

Where $y_{hij}$ is defined as the observation on variable Y for household j in village i of stratum h. Here in each rural village a sample of 80 households is drawn with 20 households allocated per quarter. Estimates per quarter can be worked out by using $n_{hi}$ = 20 instead of 80. The other parameters do not change.

### 4.3.5 Adjustment of Estimates

From the NMS we can estimate the total population for mainland Tanzania using initial weights. If the estimate is different from the estimate obtained by extrapolation we make use of the ratio estimate that is better than the unbiased estimate as given by NMS. The estimate is

$$\hat{Y}_{adj} = \hat{Y} \frac{Z_{proj}}{\hat{Z}} \qquad\qquad \dots \qquad (21)$$

where $\hat{Y}$ is the estimate of any total from NMS;

$\hat{Z}$ is the estimate of the population total from NMS, which is obtained from the present survey;

$\hat{Z}_{proj}$ is the projected population total of mainland Tanzania. The project population for year 2000 in mainland Tanzania is 31,824,118. This has been obtained by using the annual population growth rate of 2.8 percent.

The quantity $adj = \dfrac{Z_{proj}}{\hat{Z}}$ is multiplied to the initial weights of the estimates.

### 4.3.6    Correction of Sample Weights for Non – response

Non – response can often be taken care of by compensatory weighing. That is very large and we can assume that the responding households do not differ substantially from the responding households with regard to survey characteristics.

The correction factor for the non – response is obtained as a ratio

$$NR = \frac{\text{Number of sampled households}}{\text{Number of households who actually responded}} \qquad ... \qquad (22)$$

The final sampling weight is then obtained by multiplying initial sampling weights by adjustment ratio and the non – response factor. This will give the following expression for calculating the weghts in h – th stratum:

$$w_h = \frac{1}{V_h} M_h \sum_i^{v_h} \frac{1}{M_{hi}} . \frac{N_{hi}}{n_{hi}} \text{ x adj x NR} \qquad \qquad ... \qquad (23)$$

### 4.3.7    Stakeholders Meeting

A Stakeholders workshop was held on 26th January 2000 at the Sheraton Hotel and was attended by 52 participants from different organizations. The main objective of the meeting was to discuss the questionnaire. The Child Labour generic Questionnaire from ILO Geneva was updated and the 1990/91 Labour Force Survey questionnaire was also discussed.

There were a number of issues raised during the workshop which include:

(i)     The need to produce a questionnaire, which is comparable to those used in previous surveys in order to facilitate trend analysis

(ii)    Timing of the survey vis-a-vis other ongoing surveys

(iii)   Age limit for a person to qualify as a child

(iv)    Definition of child labour and child work

(v)     Comparability of Child Labour Concepts to the International Standards and Recommendations

(vi)    Definition of "Unemployment" to suit the National situation as well as the need to consider effects of seasons on employment

(vii)   Ways of measuring women's work at household and community levels and how to include them in the questionnaire

(viii)   The need to include mining and tourism activities in the questionnaire among other economic activities

(ix)   Recruitment of enumerators be transparent and their training be thorough in order to minimize errors

(x)   Publicize the importance of the survey by using various information media such as television, radio, news papers and magazines and

(xi)   Information given by respondents to be kept confidential

Regarding " Child Labour", it was revealed at the meeting that by International Convention "Child Labour applies to any child aged 5 to 17 years working under hazardous conditions detrimental to his/her welfare".

**Participants recommended that: -**

   i.   The questionnaire should be tested

   ii.   Manuals should be carefully prepared to allow proper interpretation of the different concepts used and

   iii.   The results of the survey should be released as early as possible

**Chapter Five**

**DESIGN OF SURVEY INSTRUMENTS AND PILOT TESTING**

## 5.0    Questionnaire Design

The questionnaire design is, of course, a key activity in any survey. The 2000/01 ILFS questionnaire design was relatively simple given that it had all features of the 1990/91 labour force survey questionnaire, except that one copy of the new questionnaire can accommodate up to five members of a household instead of one. Two additional questionnaires CLS1 and CLS2 were included in the 2000/01 survey in order to collect information relating to child labour. Major innovations made to the questionnaire by the technical committee before its final version was printed are as follows:

1.  The statement "list of all members of the household" on LFS1 questionnaire in column 2 was added.

2.  The wording of question no 56 was changed to: "Are the benefits/earnings from this work appropriate in terms of hours under normal circumstances".

3.  Coding of Question 3.1 in CLS1 under the less than 3 hours was split into two separate codes as follows:-
    (i)     Less than 1 hour each day and
    (ii)    1 – 2 hours, each day.
The reason being that the period was too long to capture information of working children.

4.  More questions on informal sector were recommended and it was agreed to include them in the final questionnaire

## 5.1    Pilot test of the Questionnaire

Pilot test of the questionnaire was conducted in Bagamoyo from 15/02/2000 to 25/02/2000. However, preparation for the fieldwork started two weeks before the pilot test. Special permission was obtained from the Pwani Regional Administrative Office. Sensitization in Pilot areas started immediately after District and village officials were consulted.

Training of the LFS/CLS pilot test field personnel took place at the Bagamoyo MANTEP Institute from 15th February 2000 to 24th February 2000. The training included thorough classroom mock interviews and field practice at Kilomo village and Dunda enumeration area. The pilot survey management staff (all from NBS) included five subject matter specialists as

trainers and 12 potential supervisors as trainees. Trainees were provided with instruction manuals in Kiswahili and were exposed to interview techniques, consistency checks and adherence to skip patterns.

## 5.2    Pilot Field Work

Pilot fieldwork commenced in the rural area of  Kilomo Village in Bagamoyo District on 21st February and ended on 22nd February 2000. Fieldwork in urban area (Dunda) started on 23rd February and ended on 24th February 2000. A total of 14 households were selected from rural households of Kilomo Village. In all, there were four teams; each comprised of three to four officers under one supervisor. Each team was assigned to randomly selected households in their respective area. In urban area, a total of 16 households were interviewed from households of Dunda Enumeration Area. As it was in the cluster, ten cell leaders were used to locate the selected households.

From the pilot survey, several lessons were learnt in particular the following:

(i)  During the training, the best way to test the trainees is to subject them to actual filling in the questionnaire rather than to administer a classroom exercise. The trainees should be sent to the field for practical training as many times as deemed possible and their work being discussed in the class to detect interviewing errors. The general consensus amongst the trainees was that the course should have been longer with more emphasis on the fieldwork.

(ii)  There should be close supervision particularly during the first month of the interview.

(iii) Care is needed when interviewing children 5 – 9 years, as they are too young to give correct information.  Some parents/guardians do not know what their children do when away from home and it is difficult for them to answer correctly questions on child activities.

Child Labour should not be stated explicitly in the questionnaire, but should rather be referred to as economic activities of children.

### 5.3 Technical Committee Meetings

Several Technical Committee Meetings were held in Dar es Salaam. The main objectives of these meetings were:

(i)     To review questionnaires and to evaluate field test including problems encountered during the Bagamoyo pilot test

(ii)    To assist in tabulation plan proposals

(iii)   To guide the day to day running of the project

(iv)    To recommend amendments/changes where necessary for smooth running of the project

### 5.4 Training of Trainers

A Training session for Trainers for the Integrated Labour Force Survey was held at Kibaha from 4th April to 9th April 2000. Two-core secretariats from the Statistics Unit in the Ministry of Labour, Youth Development and Sports were the main trainers. A total of 35 participants from The National Bureau of Statistics, Planning Commission and the Statistics Unit of the Ministry of Labour, Youth Development and Sports attended the seminar. The training session, which consisted of classroom lectures, discussions and practical programmes, comprised of the following:

(i)     Background and objectives of the ILFS in National

(ii)    Responsibilities of supervisors and enumerators

(iii)   Methods of filling in the questionnaires

(iv)    Field practicals

During the fieldwork practicals, trainees were taken to the nearby urban and rural areas, where prior appointments had been made with the households to be interviewed, one or two days before the interviews. Few problems were encountered during training, which led to changing the layout of the questionnaire.

It was recommended that all surveys conducted by the NBS should have standard definitions and uniform concepts such as those related to Household definition, Literacy, Education level, Marital status, etc, in order to allow for comparison.

### 5.5 Printing of Questionnaires

During the first week of April 2000, about 4,500 questionnaires were printed to cover the requirement for training of interviewers and first quarter enumeration exercise. Additional 13,200 questionnaires were printed to cover the requirement of the second, third and fourth quarters of the survey. All printing activities were done at the census printing unit and this helped speed up delivery of the first batch of questionnaires and instruction manuals.

**Chapter Six**

**TRAINING OF FIELD STAFF**

## 6.0    Training of LFS/CLS Regional Supervisors and Field Enumerators

The training started on 25<sup>th</sup> April 2000 and ended on 8<sup>th</sup> May 2000. All 124 enumerators who were supposed to be trained at the six centres participated. The training was designed in such a way that a potential weak enumerator could be spotted. Enumerators were divided into 5 to 6 discussion groups and were assigned homework in the evening for the next day's presentation. Daily quizzes were given to enumerators before starting a new topic followed by intensive exercises on the previous topic. The training of field interviewers and Regional Statistical Officers lasted for twelve days, consisting nine days of intensive classroom training and three days for field practicals and general review.

Before departing for their respective training centres, the trainees were provided with fieldwork equipments to take to their respective areas. Lists of selected households were sent directly to the regions for distribution by the Regional Statistical Officers (RSO's). In all centres a total of 159 persons participated as follows: -

**Dodoma (Kondoa centre)**
Kondoa centre had 27 enumerators from Singida (5), Dodoma (7), Morogoro (6), Dar Es Salaam (5) and Coast Region (4). Others included 1 Director, 2 Trainers and 6 Regional Statistical Officers.

**Mwanza (Magu centre)**
Magu centre had 24 enumerators from Kagera (9), Mwanza (8), and Mara (7). Others included 3 Trainers and 3 Regional Statistical Officers.

**Mbeya (Kyela centre)**
Kyela centre had 19 enumerators from Rukwa (4), Mbeya (8) and Iringa (7). Others included 2 Trainers and 2 regional Statistical Officers.

**Tabora (Nzega centre)**
Nzega centre had 20 enumerators from Shinyanga (9), Tabora (6), and Kigoma (5). Others included 2 Trainers and 3 Regional Statistical officers.

**Kilimanjaro (Same centre)**
Same centre had 20 enumerators from Kilimanjaro (6), Tanga (7) and Arusha (7). Others included 2 Trainers, 1 Director and 3 Regional Statistical Officers.

**Mtwara  (Masasi centre)**

Masasi centre had 14 enumerators from Mtwara (6), Lindi (4) and Ruvuma (4). Others included 2 Trainers, 2 Regional Statistical officers and 1 Supervisor from Lindi.

Problems experienced by trainers during training sessions were as follows:

(i)     Sickness made some participants fail to attend field practicals.

(ii)    Time allocated for training was too short when compared to the understanding ability of some participants.

(iii)   There were some problems spotted in both questionnaires, especially on skipping pattern in the CLS questionnaires. The correct pattern was communicated to all training centers. Enumerators were given hand written instructions which were later entered in the revised questionnaires after consultation with the ILFS technical working group.

**Recommendations from the training centres**

(i)     Time allocated for preparation of instruments at training centres was not enough taking into consideration that trainers had to communicate with the local authorities, mobilize teaching materials and look for other facilities.

(ii)    Supervision should start as soon as the first quarter begins so as to correct the mistakes that would be committed by interviewers at the beginning.

(iii)   For future surveys, Q34 in LFS2 should have a probing question like that in question 7(a) to allow probing in order to know if there are respondents who conduct secondary activities but were temporarily absent from them during interview.

(iv)    There is a need to increase the number of days for training interviewers in order to allow for more time for field practicals.

(v)     The starting date for training should be communicated to all Regional Statistical Officers early in order to reduce complaints.

(vii)   All survey materials for distribution to interviewers should be sent to the training centres early enough in order to minimize travel costs for the enumerators who otherwise would have to collect them from RSOs offices.

**Chapter Seven**

**FIELD WORK AND ORGANISATION**

## 7.0    FIELD WORK

### 7.1    Field equipment

Each interviewer was provided with the following items:
(i)      Identity card
(ii)     Introduction letter
(iii)    Questionnaires
(iv)    List of selected households
(v)     A biro pen
(vi)    A map for all enumeration areas in urban areas
(vii)   A rain coat and a pair of boots for use during the 2$^{nd}$ quarter enumeration period
(viii)  Leather bag
(ix)    Interview manual

### 7.2    Interview

Two or three days before the beginning of each survey quarter, the enumerator had to inform the households to be covered in the survey on the interview dates.

Fieldwork officially started on 15$^{th}$ May 2000. However, in Dar es Salaam and Coast Regions the work started on 12$^{th}$ May 2000 immediately after the arrival of enumerators from their training centres. Interviews continued on quarterly basis until March 2001. In general, most interviews were conducted according to plan. However, there were delay problems in regard to some Urban EAs where the interviews had to be deferred to a later quarter in order to have more days to complete interviews. The following enumeration areas were covered in later quarters:  Kimara (DSM) from first quarter to fourth quarter, Tanganyika packers (DSM) from fourth quarter to first quarter, Gangilonga (Iringa) from first quarter to fourth quarter, Pamba (Mwanza) from first quarter to second quarter, Sabasaba (Morogoro) from second quarter to fourth quarter and Mvinjeni (Iringa) from third quarter to fourth quarter. This problem did not arise with the rural villages.

The final quarterly distribution of Urban EAs was as follows:

**Table 7.1: Quarterly Distribution of Urban EAs by Strata**

| Strata | 1st Q | 2nd Q | 3rd Q | 4th Q | TOTAL |
|---|---|---|---|---|---|
| High | 3 | 2 | 0 | 3 | 8 |
| Middle | 5 | 8 | 5 | 5 | 23 |
| Low | 15 | 15 | 20 | 12 | 62 |
| Other | | | | | |
| Urban | 10 | 7 | 5 | 7 | 29 |
| **Total** | **33** | **32** | **30** | **27** | **122** |

The final distribution is not perfect but reasonable. However, it may have had some effect on quarterly urban estimates as mentioned in the survey report (see appendix 2). For the 100 rural villages the quarterly distribution of households to be interviewed were distributed as follows:

**Table 7.2: Quarterly Distribution of Rural Households by Household Size**

| Household Size | 1st Q | 2nd Q | 3rd Q | 4th Q | TOTAL |
|---|---|---|---|---|---|
| '1 – 4' | 6 | 6 | 7 | 7 | 26 |
| '5 – 7' | 7 | 7 | 6 | 7 | 27 |
| '8+ | 7 | 7 | 7 | 6 | 27 |
| **Total** | **20** | **20** | **20** | **20** | **80** |

Most field enumerators interviewed the selected households according to the plan. Only a few of them shifted some households to other quarters, but the number of households interviewed remained 20 per each quarter.

Forms were dispatched to Dar es salaam or collected by headquarter supervisors on a quarterly basis. The method of collecting questionnaires by headquarter supervisors helped a lot as most errors were corrected in the field before questionnaires reached Dar es Salaam. This was also the quickest way of delivery of questionnaires and payment of interviewer allowances.

A record of all questionnaires received was kept and this helped the follow up of all unreported and missing households.

A total of five interviewers one each from Kamsekwa (Tabora), Marangu (Kilimanjaro), Hanga (Lindi), Kanga (Morogoro), and Miyuyu (Mtwara) villages absconded from their duty stations and new enumerators had to be recruited to replace them.

This necessitated incurring additional costs to train the new enumerators.

## 7.3    Supervision

A total of four supervision trips by headquarter supervisors and monthly visits by regional supervisors were conducted. The objectives of these supervision trips were:

(i)  To check if all interviewers were collecting data as instructed.

(ii) To edit the questionnaires for consistency and completeness in the field before submission.

(iii)To distribute interviewer allowances and additional questionnaires.

During the supervision, the following were the main findings: -

(i)      Some enumerators had a shortage of questionnaires due to large household sizes particularly in Mwanza, Kagera and Shinyanga regions. Additional questionnaires were dispatched to cover for the short fall.

(ii)     Most interviewers had problems when interviewing children aged between 5 – 10 years. They did not understand the concepts of work especially during the first two weeks of the survey. Retraining of interviewers in all selected areas was conducted in order to improve their performance.

(iii)    Interviewers in rural areas requested to be paid transport allowances, to enable them to hire bicycles in order to reach respondents who were far away. Additional transport allowance of 10,000/= shillings was paid per quarter to all interviewers to cover the last three quarters.

(iv)     Most interviewers requested to have their quarterly allowances of 90,000/= shillings increased to 120,000/= shillings. This demand could not be met due to financial constraints.

(v)      Interviewers requested to be provided with rain coats and boots before the rain season. All interviewers and supervisors were provided with rain coats and boots during the second quarter.

**Chapter Eight**

**DATA PROCESSING AND HANDLING**

## 8.0 DATA PROCESSING

### 8.1 Manual editing and coding

The Editing Manual was prepared and a special training session of five days was conducted from 24th July to 28th July 2000 to train editors.

A team of eight persons including subject matter officers was formed to undertake manual editing and coding of the questionnaires received from the regions. A special procedure for receiving questionnaires from the regions was set up. One person was assigned the task of recording the questionnaires as they arrived from different regions.

The ILFS questionnaire was very complex and required considerable diligence in editing and coding.

Major tasks of editors and coders were: -

(i) To check if all questionnaires of a household were present.
(ii) To check each questionnaire for completeness, and make imputation if necessary.
(iii) To code for TASCO, ISIC and Subject of Training in all relevant questions.
(iv) To check "other" categories in questions to see if they could be re-allocated to a specific category.
(v) To check sequence, completeness and consistency in both Labour Force (1990/91 and 2000/01) general questionnaire and child labour questions.

In general the manual editors and coders did not do their work well. Many errors were spotted later during computer edits. As a result the Computer editors took considerable time cleaning the data.

### 8.2 Data entry

Data entry was done on eight PCs. Six data entry staffs were trained in the ILFS data entry procedures for four days. Two subject matter officers were present during data entry to make sure that no problems would remain unsolved during the data entry and were responsible for backups of data each day. The actual processing of data for the first and second quarters started in October instead of August 2000 as it was earlier planned. This happened due to a number of factors:

(i)     Delay in recruitment of a computer system designer, which was to be carried out in March 2000, but it did not take place as planned. This would have enabled the National Bureau of Statistics to design computer systems for data entry and processing early.

(ii)    Project funds were received late in April and June 2000. This affected the planned timetable, since hiring of data entry personnel had to wait for the availability of funds. Processing of the data for last two quarters progressed well and by 19th May 2001 all data editing and entry was completed.

## 8.3     Data control and computer editing

The work of developing a good computer edit program took considerable time due to the complexity of both the LFS and CLS questionnaires. The Officers who were dealing with the development of this program took time to study first the software, design and implementing the programs.

Data cleaning programs were developed in November 2000. The entry and cleaning of data for the first quarter were completed by 22nd February 2001. Data cleaning for the first quarter CLS questionnaires was difficult due to the fact that these questionnaires had many skips.

The following errors were detected during data cleaning exercise:

(i)     Wrong edits of questionnaires and coding

(ii)    Miss-keying in of data by data entry personnel

(iii)   Errors due to computer editing – these errors were accidentally committed during computer edit operations and they were detected by use of the frequency tables.

After detecting these problems the data processing team instituted the following guidelines to be followed by data control personnel: -

(i)      All codes entered were to be cross –checked making sure those correct codes for TASCO, ISIC and subject of training are entered in their respective positions and corresponding questions.

(ii)     Household members listed in the LFS1 page two should be in serial order making sure that all children under 5 years are at the bottom of the list.

(iii)    Household members in LFS2 should also be in serial order with no gaps. This was to avoid execution errors when running a program.

**Table 8.1: Summary of errors in percentages between uncleaned questionnaires per quarter for the whole survey period**

| Description | Quarter 1 | Quarter 2 | Quarter 3 | Quarter 4 |
|---|---|---|---|---|
| Percentage of non- response | 4.0 | 4.0 | 4.5 | 5.7 |
| Estimated error messages | 32,000 | 17,000 | 9,000 | 5,000 |
| Percentage flagged in LFS | 70 | 50 | 45 | 53 |
| Percentage flagged in CLS | 30 | 50 | 55 | 47 |
| Wrongly skipped LFS2 Q4 | 4.5 | 2.2 | 2.1 | 0.2 |
| Wrongly left blank Q17 or 34 | 1.6 | 1.0 | 0.5 | 0.2 |

As can be seen in the table above the number of error messages flagged in Q1 questionnaires when compared with those flagged in Q2, Q3 and Q4 questionnaires separately, the magnitude of errors diminished due to the fact that frequent retraining during supervision helped a lot to minimize these errors.

## 8.4    Frequencies and Checks of Data

Frequency tables of all the questions were prepared after the completion of data cleaning activity for each Quarter. These frequency tables assisted in locating and detecting extra errors, which were relatively much fewer. Although using QUICKTAB - a component of IMPS application could produce frequency tables, however, all tables were produced using an SPSS package.

Extensive series of computer edits using IMPS-CONCOR a component of IMPS application was found to be more efficient and time saving than other types of edits. Several cycles were necessary before each quarter was clear of errors. Editing on the screen was faster and enabled one to edit several types of errors at once. Frequencies of all questions and table checks were run as soon as data cleaning was over. This facilitated locating unusual values, which were not picked up by computer edits.

**Table 8.2: Summary of some results obtained from the frequency tables of the cleaned data for the four quarters**

| Descriptions | Q1 | Q2 | Q3 | Q4 |
|---|---|---|---|---|
| No. of clusters involved | 133 | 132 | 130 | 127 |
| No. of House-holds interviewed | 2,982 | 2,984 | 2,892 | 2,824 |
| Fully responding House-holds | 2,963 | 2,874 | 2,757 | 2,664 |
| Not fully responded | 119 | 110 | 135 | 160 |
| No. of Household members | 16,256 | 16,261 | 15,478 | 14,744 |
| Average Household size | 5.68 | 5.66 | 5.61 | 5.53 |
| Percentage non- response | 4.00 | 3.70 | 4.70 | 5.70 |

Some unusual results that were spotted are as follows:

(i)     There were "professionals " with average monthly income as low as shs. 3,500/=

(ii)    Persons employed in Central /Local Government with Monthly income below shs. 1000/=  were spotted.

All the unusual values were crosschecked on the original questionnaires and necessary changes were made to rectify them.

## 8.5     Data Processing and Tabulation

Tabulation was done using a statistical package called SPSS. This package stores data files in fixed record length formats. Information from different sections of the survey questionnaires was stored in one ASCII file. Record types distinguish the different sections that had varying record lengths.  So the ASCII file was divided into eight ASCII files each with a fixed record length. These were later exported into SPSS format together with the sampling weight file.

Note that under the recommendations of the computer experts, the SPSS and not the CENTS – a component of IMPS software was applied in the tabulation and analysis due to the problem of round off of the weighting program. Using SPSS minimized this problem. Some of the Tables produced in SPSS needed some improvements. Therefore they were copied into MS EXCEL worksheets and customized.

The process of deriving variables and merging files required for tabulation was done using an SPSS program (called lfs01-9.sps). Problems of missing values were encountered in derived variables. Modifying and improving the definitions was solved by the subject matter experts. In addition to that some variables had many categories or values which generated long tables. This problem was solved by deriving variables that group together the individual categories or variables.

**8.6     Estimation Procedures**

The NMS at National level was used for the ILFS. It comprised of 100 villages for the rural sample and 122 EAs for the urban sample. This number of PSUs was expected to be sufficient to give estimates of sufficient precision for most variables at national level.

Since the ILFS data were collected on a sample basis, sample weights for estimation purposes at national level were applied to the survey data. A consultant was contracted to produce the ILFS set of weights. Sampling weights were used to get higher level aggregates for the four quarters involved. The survey data has been added with a sample weight for estimation purposes at national level.

**8.7     Accuracy and Consistency of the Survey Results**

The ILFS estimates are reliable because they are consistent and comparable with other similar survey estimates. The 2000/01 Integrated Labour Force Survey results had the following estimates as compared to the 1990/91 results.

**Table 8.3:    Comparison of Selected Estimates between the 2000/01 ILFS and the 1990/91 LFS**

| Year | 1990/91 | 200/01 |
|------|--------|--------|
| Average household size | 4.6 | 4.3 |
| Total number of households (10+) | 4,584,581 | 5,803,949 |
| Average employed per Household | 2.2 | 2.0 |
| Average unemployed per Household | 0.1 | 0.1 |
| Average not economically active per Household | 0.8 | 0.9 |

The results are consistent as far as similar variables are considered. The minor deviations if any are a result of round off errors.

However, there are some limitations. The estimates are given at national level only, with a breakdown of Rural and Urban. The Urban component was further broken down into DSM City and 'Other Urban'. The results did not cover some special groups of the population such as Diplomats, Institutions, Refugee camps and the like. These data cannot facilitate labour planning at lower levels, for example Regional, District and so on.

## 8.8 Timeliness, Data Consistency and Limitations

Data collection and processing were completed in April 2001 and June 2001, respectively. Hence both activities were completed as scheduled.

## 8.9 Dissemination of Survey Results

The results of the 2000/01 Integrated Labour Force Survey are available (to stakeholders) in the form of the Analytical Report. In order for the report to be user-friendly, charts, tables and relevant attachments have been included.

**Chapter Nine**

**SURVEY BUDGET**

**9.0     Cost of the Survey**

The cost component of the survey covers the period from 1999/2000 to 2000/01. It includes the cost during the planning period, questionnaire design and printing, purchase of stationery, listing and pilot testing, main survey field work allowances, data processing, cost of publication and dissemination workshop.

**9.1     The Planned Budget**

The planned budget did not include salaries of permanent employees.

Table 9.1 below shows the summary breakdown of activities with the budgeted amount per each donor

**Table 9.1: Itemized Budget Allocation by Donor**

(Shs. '000')

| Activity | DANIDA | ILO | TOTAL |
|---|---|---|---|
| 1.  Preparation of survey instruments | 7,148 | 4,100 | 11,248 |
| 2.  Listing | - | 52,000 | 52,000 |
| 3.  Printing  & Stationery | 8,225 | 4,424 | 12,649 |
| 4.  Field logistics | - | 1,944 | 1,944 |
| 5.  Recruitment & Training | 52,938 | 30,036 | 82,974 |
| 6.  NBS Agency fees | 28,552 | 6,400 | 34,952 |
| 7.  Field operation | 126,360 | 33,880 | 160,240 |
| 8.  Editing & coding | 21,950 | 6,600 | 28,550 |
| 9.  Stakeholders meeting | 1,026 | 1,000 | 2,026 |
| 10. Data analysis & Report writing | 5,770 | - | 5,770 |
| 11. Report production & | 20,680 | 7,360 | 28,040 |
| Dissemination | 41,156 | 20,256 | 61,412 |
| 12. Balance utilized by the MLYD | | | |
| **Total** | **313,805** | **168,000** | **481,805** |

**Chapter Ten**

**SURVEY EVALUATION AND RECOMMENDATIONS**

## 10.0    LESSONS LEARNED

### 10.1    Involvement of Data Processing Personnel

Data processing personnel have to be identified and involved right at the start of the surveys. This will reduce problems at data processing stage. They have to participate in the questionnaire design, get enough time to write and test programs. They should participate in the pre-tests activities and using the questionnaires from the pre-test activities they should prepare and test programs which will be used for data capture. For the ILFS, the data obtained from the pre- test were not used to test the data capture programs.

### 10.2    Questionnaire design – LFS1

In column 14, the codes should have been rearranged into pre-school '00', std 1 '01', std 2 '02', and so on.

The list of household members should have been arranged in such a way that children under 5 years of age would be at the bottom of the list. This would avoid matching problems in LFS2, CLS1 and CLS2. It is also recommended in future to design a complete separate questionnaire to be administered wholly by child and parent/guardian separately.

This will remove the confusing situation and make the formulation of skipping pattern straight forward. The 2000/01 questionnaire was divided and asked in four different questionnaires targeted to different respondents as opposed to a single/ same respondent.

### 10.3    Questionnaire design -LFS2

This means that the household member numbers in LFS2 should have been in serial order with no gaps in between. Questions 4(a) and 9, the code for others '9' attracted a higher frequency of responses. It is recommended to include other options in the questions.

Question 56 should have appeared just after Question 19 to avoid problems in the set of derived items, which tended to produce overlapping and inconsistent results.

**10.4    The need to have a Technical Committee**

For the whole survey period the Technical Committee was very useful on matters regarding the smooth running of the project, the questionnaire used during the survey, tabulation plan and the numbers of reports to be produced.

**10.5    The ILFS initially had no funds to cover the Training of Trainers Course, but the conducting of this course helped a lot to come up with the following:**

(i)      A new revised questionnaire for the ILFS capable of accommodating up to 5 persons

(ii)     Recommendations by participants for the NBS to have common standards on methodology and concepts on all surveys conducted by the agency.

**10.6    The rise in the cost of fuel, printing materials and vehicle maintenance expenses**

Prices of the above-mentioned items increased above the original budget. For example, the initial price of diesel when the project started was shs. 480/= per litre, but this price increased to shs. 1000/= per litre in distant Districts of  Mbinga, Namanyere, Mpanda, Kasulu, Kibondo, Karagwe, Biharamulo, Ngara, Tarime, Muleba and Tunduru . Hence for future surveys allowance should be made for such price changes.

**10.7    Budget for training of new enumerators**

The ILFS had five enumerators who absconded from their duties and this necessitated incurring additional training costs.

**10.8    The need to have project funds available before the project starts**

For the first quarter of the ILFS project, funds reimbursement was a problem and this affected the planned timetable.

**10.9    The need to have regular supervision trips**

Supervision trips helped to check consistency, completeness and dispatch of survey materials to cover for the shortfall. Both the Headquarter and Regional supervisors rectified the two child labour questionnaires (CLS1 and CLS2), which had many problems on skipping pattern.

### 10.10   The need to have well documented survey weights

This should be done in advance; the ILFS project had problems on a number of weights, which took time to resolve.

### 10.11   The need to have an Information Technology Unit which is capable of handling all data processing activities

Data processing for the ILFS, which was planned to take place during March 2000, had to wait for the recruitment of a computer system designer in October 2000.

### 10.12   The need for close supervision of listing

There is need for close supervision during listing exercise especially in urban areas where during data collection there were a substantial number of unknown household heads. The case of seven heads of households in Chamwino area in Dodoma Region and six heads of households in Mbugani area in Mwanza Region were typical examples.

### 10.13   The designing of the listing form, which had a column indicating the total number of household members, helped a lot during selection of households to be interviewed. It was agreed that since most children were to be interviewed, households selection should be based on the size of each household.

### 10.14   The need to have a separate budget for data processing activities

This budget should be used to motivate the data processing personnel in order to keep them in office.

### 10.15   The need to have adequate number of survey personnel

During the 2000/01, there were two surveys in progress namely the ILFS and HBS. The Regional Statistical Offices were required to supervise enumerators for both surveys at the same time. Lack of close field supervision from RSO's resulted in many poor interviews and many questionnaires had to be left behind for corrections/ re-interviews after visit by head office supervisors, and this led to delay in carrying out head office activities.

## 10.16   The need for better arrangements in disbursing approved funds

This will enable implementation of activities as originally planned. The ILFS data analysis and report writing were delayed for about five months after data processing was completed because the Ministry of Labour, Youth Development and Sports/Donors were awaiting for physical and financial report.

## LIST OF PSUs AND VILLAGES BY DISTRICT AND REGION

List of the 100 PSUs and name of village (s) by district and region, for module A

| Region | District | PSUs ( village ) | Name of branch | NO. of H/H Sample | WARD& |
|---|---|---|---|---|---|
| | | | | H/H Sample | EA/Vila/No. |
| 1, Dodoma | Kondoa | 1,Idindiri | Busi | 80 | 011151002 |
| | Kondoa | 2, Itundwi | Mnenia | 80 | 011151002 |
| | Mpwapwa | 3, Mlali Bondeni | Mlali | 80 | 012081004 |
| | Mpwapwa | 4, Lwihomelo | Wotta | 80 | 012181003 |
| | Dodoma Rural | 5, Mindola | Ilindi | 80 | 013361001 |
| | Dodoma Rural | 6, Sasajila | Iringa Mvumi | 80 | 013191004 |
| | | | | | |
| 2, Arusha | Arumeru | 7, Oldadai | Sokoni II | 80 | 022011003 |
| | Arumeru | 8, Maroroni | Kikatiti | 80 | 022141003 |
| | Babati | 9, Tsamasi | Qasii | 80 | 025051001 |
| | Hanang | 10, Endaswold | Endasaki | 80 | 026021001 |
| | Mbulu | 11, Silaloda | Sanu | 80 | 027021001 |
| | Ngorongoro | 12, Kisangiro | Digodigo | 80 | 028091004 |
| | | | | | |
| 3, Kilimanjaro | Rombo | 13, Marangu | Olele | 80 | 031141004 |
| | Same | 14, Mtii | Mtii | 80 | 033121002 |
| | Moshi Rural | 15, Kondeni | Mwika South | 80 | 034011003 |
| | Hai | 16, Tella | Mechame Mashariki | 80 | 035011005 |
| | Hai | 17, Karansi | Siha Kati | 80 | 035103006 |
| | | | | | |
| 4, Tanga | Lushoto | 18, Vuga Bazo | Vuga | 80 | 041061001 |
| | Lushoto | 19, Kweshindo | Mtae | 80 | 041171003 |
| | Muheza | 20, Kigongomawe | Ngomeni | 80 | 043141002 |
| | Muheza | 21, Kigombe | Kigombe | 80 | 043151001 |
| | Handeni | 22, Saunyi | Kisangasa | 80 | 046151006 |
| | Handeni | 23, Tiliani | Kwankoje | 80 | 046081005 |
| | | | | | |
| 5, Morogoro | Kilosa | 24, Ulaya | Ulaya | 80 | 051281003 |
| | Kilosa | 25, Kitaita | Chakwale | 80 | 051021003 |
| | Morogoro Rural | 26, Kanga | Kanga | 80 | 052191001 |
| | Ulanga | 27, Biro | Biro | 80 | 054221002 |
| | Ulanga | 28, Iragua | Iragua | 80 | 054051001 |
| | | | | | |
| 6, Pwani | Bagamoyo | 29, Msolwa | Chalinze | 80 | 061062008 |
| | Kibaha | 30, Dusunyala | Mlandizi | 80 | 062073001 |
| | Rufiji | 31, Utunge | Utete | 80 | 064043002 |

| | | | | | |
|---|---|---|---|---|---|
| 7, Lindi | Kilwa | 32, Hanga | Kipatimu | 80 | 081141004 |
| | Lindi Rural | 33, Hingawali | Sudi | 80 | 082191006 |
| | Lindi Rural | 34, Nanganga | Malolo | 80 | 082211003 |
| 8, Mtwara | Mtwara Rural | 35, Utende | Ndumbwe | 80 | 091141001 |
| | Newala | 36, Miyuyu | Chilangala | 80 | 092101002 |
| | Newala | 37, Namahonga | Maundo | 80 | 092381004 |
| | Masasi | 38, Mpombe | Napesho | 80 | 093161004 |
| | Masasi | 39, Mbonde | Lisekise | 80 | 093013009 |
| | | | | | |
| 9, Ruvuma | Songea Rural | 40, Kilangalanga | Mkongo | 80 | 102151001 |
| | Songea Rural | 41, Lipaya | Mpitimbi | 80 | 102201001 |
| | Mbinga | 42, Langiro | Langiro | 80 | 103211001 |
| | | | | | |
| 10, Iringa | Iringa Rural | 43, Tagamenda | Magulilwa | 80 | 111061002 |
| | Mufindi | 44, Njonjo | Nyororo | 80 | 112111007 |
| | Njombe | 45, Korintho | Luduga | 80 | 113081005 |
| | Ludewa | 46, Luana | Luana | 80 | 114191002 |
| | Makete | 47, Matamba | Matamba | 80 | 115111001 |
| | Iringa Urban | 48, Ilula - Mwaya | Image | 80 | 111181015 |
| | | | | | |
| 11, Mbeya | Mbeya Rural | 49, Mkunywa | Madibira | 80 | 122031002 |
| | Mbeya Rural | 50, Isonso | Ilembo | 80 | 122151005 |
| | Mbeya Rural | 51, Isunura | Mawindi | 80 | 122041002 |
| | Kyela | 52, Mbula | Ikwanja | 80 | 123121001 |
| | Rungwe | 53, Kyimo | Nkunga | 80 | 124241005 |
| | Mbozi | 54, Ilolo | Vwawa | 80 | 126163002 |
| | Mbeya Urban | 55, Dodoma | Ilemi ( New ) | 80 | 127091001 |
| | | | | | |
| 12, Singida | Iramba | 56, Ndulungu | Kaselya | 80 | 131261001 |
| | Iramba | 57, Nsunsu | Ntwike | 80 | 131081001 |
| | Manyoni | 58, Chibumangwa | Sasajila | 80 | 133091003 |
| | Singida Urban | 59, Unyamikumbi | Unyamikumbi | 80 | 134081005 |
| | | | | | |
| 13,Tabora | Nzega | 60, Butandula | Ijanija | 80 | 141021002 |
| | Igunga | 61, Choma | Choma | 80 | 142161001 |
| | Tabora Rural | 62, Itaga | Misha | 80 | 143201002 |
| | Urambo | 63, Kamsekwa 'B' | Igagala | 80 | 144231002 |
| | Urambo | 64, Nsendakanoge | | 80 | 144021002 |
| 14,Rukwa | Mpanda | 65, Kamjela | Mishamo | 80 | 151251004 |
| | Sumbawanga | 66, Kapewa | Mpui | 80 | 152111008 |
| | Sumbawanga | 67, Mititi | Laela | | 152121002 |
| | | | | | |
| 15, Kigoma | Kibondo | 68, Kazilamihunda | Kasanda | 80 | 161141002 |
| | Kibondo | 69, Nyakasanda | Mabamba | 80 | 161173002 |
| | Kasulu | 70, Rusesa | Rusesa | 80 | 162171002 |
| | Kasulu | 71, Kasangezi | Muzye | 80 | 162141005 |
| | | | | | |

**Appendix 1 (Continued**

| | | | | | |
|---|---|---|---|---|---|
| 16,Shinyanga | Bariadi | 72, Zaanzui | Zagayui | 80 | 171151002 |
| | Maswa | 73, Mweshegeshi | Ipililo | 80 | 172101001 |
| | Shinyanga | 74, Shimondoli | Mwatini | 80 | 173121001 |
| | Shinyanga | 75, Igaga 'A' | Uchunga | 80 | 173201006 |
| | Kahama | 76, Mgaya | Masumbwe | 80 | 174131001 |
| | Kahama | 77, Mwendakulima | Kinaga | 80 | 174051007 |
| | Meatu | 78, Ikigijo | Mwandoya | 80 | 176071001 |
| | Meatu | 79, Mwamanongu | Mwabuzo | 80 | 176111002 |
| 17, Kagera | Karagwe | 80, Ahakishaka | Nyabiyonza | 80 | 181021008 |
| | Karagwe | 81, Kahundwe | Kituntu | 80 | 181111007 |
| | Bukoba Rural | 82, Bunazi | Kasambya | 80 | 182031006 |
| | Bukoba Rural | 83, Kasambya | Gera | 80 | 182111003 |
| | Muleba | 84, Magata | Muleba | 80 | 183183004 |
| | Muleba | 85, Burungura | Mubunda | 80 | 183191002 |
| | Biharamulo | 86, Katende | Katende | 80 | 184091001 |
| | Ngara | 87, Kanazi | Kanazi | 80 | 185031001 |
| | | | | | |
| 18,Mwanza | Ukerewe | 88, Nabweko | Irugwa | 80 | 191161002 |
| | Magu | 89, Nyangiri | Igalukilo | 80 | 192191001 |
| | Mwanza | 90, Igombe | Bugongwa | 80 | 193161002 |
| | Kwimba | 91, Sanga | Fukala | 80 | 194341005 |
| | Sengerema | 92, Nyamtelela | Katunguru | 80 | 195041004 |
| | Geita | 93, Bukwimba | Bukwimba | 80 | 196091001 |
| | Geita | 94, Nyabulanda | Mwingiro | 80 | 196201003 |
| | Geita | 95, Nyaseke | Bulela | 80 | 196251004 |
| | | | | | |
| 19, Mara | Tarime | 96, Omoche | Nyahongo | 80 | 201201001 |
| | Tarime | 97, Ochuna | Nyathorogo | 80 | 201161004 |
| | Serengeti | 98, Nyamburi | Mugumu ( R ) | 80 | 202011006 |
| | Musoma Rural | 99, Musanja | Murangi | 80 | 203151003 |
| | Musoma Rural | 100, Nyamisisye | Kukirango | 80 | 203051002 |
| | | | | | |
| | | | | | |

**Appendix 2**

## LIST EAs BY URBAN LOCALITY, DISTRICT AND REGION
### List of 122 EAs and name of Branches by regional, district and urban Locality as per 1988 population.

| Region | District | Name of Urban Locality | Name of branch | No. of H/H H/H Sample | EA NO. |
|---|---|---|---|---|---|
| 1. Dodoma | Dodoma | Dodoma | 1. Chamwino | 35 | 014032001 |
| | | | 2. Makole | 30 | 014052006 |
| | | | 3. Chang'ombe | 30 | 014232015 |
| | | | 4. Majengo | 30 | 014024010 |
| | | | | | |
| 2. Arusha | Monduli | Namanga | 5, Kimokua/namanga | 30 | 021073304 |
| | Arusha | Arusha | 6, Sekei | 35 | 023032012 |
| | | | 7, Sekei | 33 | 023032003 |
| | | | 8. Tindiga | 30 | 023062003 |
| | | | 9, Ngaranero | 30 | 023072028 |
| | | | | | |
| 3. K'njaro | Mwanga | Mwanga | 10, Mwanga | 30 | 032023301 |
| Moshi | Moshi | | 11, Bondeni | 35 | 036092011 |
| | | | 12, Majengo | 33 | 036024010 |
| | | | 13, Majengo | 30 | 036042003 |
| | | | 14, Kiusa | 33 | 036082007 |
| | | | 15, Pasua | 30 | 036102012 |
| 4, Tanga | Lushoto | Mlalo | 16, Mlalo | 30 | 041243308 |
| Tanga | Tanga | | 17, Majengo "A | 33 | 044022008 |
| | | | 18. Ngamiani Kusini | 30 | 044072008 |
| | | | 19. Ngamiani Kaskazini | 33 | 044062007 |
| | | | 20, Amboni /Magharibi | 33 | 044202008 |
| | | | 21, Mabawa Magharibi | 30 | 044142002 |
| | Handeni | Chanika | 22, Kwamgumi | 30 | 046223306 |
| | | | | | |
| 5,Morogoro | Kilombero | Mkamba | 23, Mkamba | 30 | 053013304 |
| | Morogoro | Morogoro | 24, Mwembe songo | 30 | 055012027 |
| | | | 25, Mji Mkuu | 30 | 055062009 |
| | | | 26, Sabasaba | 30 | 055122007 |
| | | | 27, Mazimbu | 30 | 055152013 |
| | | | | | |
| 6, Coast | Bagamoyo | Bagamoyo | 28,Dunda | 30 | 061062008 |
| Kibaha | Kibaha | | 29. Maili Moja | 30 | 062013303 |
| | Mafia | | 30, Kilindoni | 30 | 065043308 |
| | | | | | |
| | | | | | |

| 7, D'salaam | Kinondoni | D'salaam | 31, Masaki | 35 | 071122070 |
|---|---|---|---|---|---|
| | | | 32, Kimara | 35 | 071062003 |
| | | | 33, Minazini | 33 | 071052002 |
| | | | 34. Makumbusho | 33 | 071052115 |
| | | | | | |
| | | | 35, Mkunguni | 33 | 071072081 |
| | | | 36, Kilimani | 33 | 071112047 |
| | | | 37, Baruti | 33 | 071122044 |
| | | | 38, Mapipa | 30 | 071012009 |
| | | | 39. Kwajongo | 30 | 071022062 |
| | | | 40, Vigaeni | 30 | 071032022 |
| | | | 41, Kwapakacha | 30 | 071042011 |
| | | | 42, Mbuyuni | 30 | 071052080 |
| | | | 43, Msisiri | 30 | 071052158 |
| | | | 44, Mtambani | 30 | 072082049 |
| | | | 45. Mkwajuni | 30 | 071092047 |
| | | | 46, Jitegemee | 30 | 071102063 |
| | | | 47. Mwembeni | 30 | 071112073 |
| | | | 48. Tanganyika Packers | 30 | 071152061 |
| | Ilala | D'salaam | 49, Upanga Mshariki | 35 | 072162006 |
| | | | 50, Kivukoni | 35 | 072182013 |
| | | | 51, Amana | 33 | 072062004 |
| | | | 52, Ilala | 33 | 072062046 |
| | | | 53, Ilala Quarters | 33 | 072072007 |
| | | | 54, Kariakoo Mashariki | 33 | 072112008 |
| | | | 55, Gerezani Mashariki | 33 | 072132008 |
| | | | 56, Mwembe Madafu | 30 | 072013320 |
| | | | 57, Tabata | 30 | 072042004 |
| | | | 58, Miembeni | 30 | 072082007 |
| | | | 59, Mtambani | 30 | 072082049 |
| | | | 60, Kombo | 30 | 072082091 |
| | | | 61, Kipawa | 30 | 072092080 |
| | | | 62, Minazi Mirefu | 30 | 072092080 |
| | | | 63, Madenge | 30 | 072102063 |
| | | | 64, Kisiwani | 30 | 072102081 |
| | | | 65, Malapa | 30 | 072102123 |
| | | | | | |
| | Temeke | D'salaam | 66, Uwanja/Taifa | 33 | 073122024 |
| | | | 67, Chang'ombe | 33 | 073152023 |
| | | | 68. Tuamoyo | 30 | 073013311 |
| | | | 69, Mbagala | 30 | 073073313 |
| | | | 70, Mbagala | 30 | 073073361 |
| | | | 71, Rangi Tatu | 30 | 073103315 |
| | | | 72, Azimio | 30 | 073122104 |
| | | | 73. Sandali | 30 | 073132001 |

|  |  |  | **Appendix 2 (Continued)** |  |  |
|---|---|---|---|---|---|
|  |  |  | 74, Maganga | 30 | 073132049 |
|  |  |  | 75, Temeke | 30 | 073132097 |
|  |  |  | 76, Tandika | 30 | 073132145 |
|  |  |  | 77, Kilimahewa | 30 | 073132193 |
|  |  |  | 78, Mtoni Mtongani | 30 | 073142005 |
|  |  |  | 79, Sabasaba | 30 | 073142053 |
|  |  |  | 80, Bustani | 30 | 073142101 |
|  |  |  | 81, Magurumbasi | 30 | 073152055 |
|  |  |  | 82, Kiungani | 30 | 073162037 |
|  |  |  |  |  |  |
| 8. Lindi | Nanchingwea | Nanchingwea | 83, Kilimahewa | 30 | 083022006 |
|  | Lindi ( U ) | Lindi | 84, Wailes | 30 | 085102006 |
|  |  |  |  |  |  |
| 9. Mtwara | Masasi | Masasi | 85, Nyasa | 30 | 093013304 |
|  | Mtwara | Mtwara | 86, Likombe | 30 | 094033307 |
|  |  |  |  |  |  |
| 10, Ruvuma | Mbinga | Mbinga | 87, Mbinga Mjini | 30 | 103063302 |
|  | Songea | Songea | 88, Lizaboni | 30 | 104052012 |
|  |  |  |  |  |  |
| 11, Iringa | Iringa | Iringa | 89, Gangilonga | 35 | 116032003 |
|  |  |  | 90, Kwkilosa | 33 | 116102007 |
|  |  |  | 91, Kwkilosa | 30 | 116102003 |
|  |  |  | 92, Mtavila | 30 | 116023312 |
|  |  |  | 93, Mvinjeni | 30 | 116072010 |
| 12, Mbeya | Chunya | Chunya | 94, Chunya | 30 | 121073304 |
|  | Kyela | Kyela | 95, Bondeni | 30 | 123053312 |
|  | Mbeya | Mbeya | 96, Iyela | 30 | 127083310 |
|  |  |  | 97, Sinde | 30 | 127112002 |
|  |  |  | 98, Nzovwe | 30 | 127142008 |
|  |  |  | 99. Nonde | 30 | 127192011 |
|  |  |  |  |  |  |
| 13, Singida | Iramba | Old Kiomboi | 100, Old Kiomboi | 30 | 131073308 |
|  | Singida | Singida | 101, Unyankindi | 30 | 134062007 |
|  |  |  |  |  |  |
| 14, Tabora | Igunga | Igunga | 102, Igunga mjini | 30 | 142013309 |
|  | Tabora | Tabora | 103, Isevya | 30 | 145022017 |
|  |  |  | 104, Mbugani | 30 | 145042013 |
|  |  |  | 105, Ng'ambo | 30 | 145082018 |
|  |  |  |  |  |  |
| 15, Rukwa | Mpanda | Mpanda | 106, Nsemulwa | 30 | 151032012 |
|  | Sumba"nga | Sumba"nga | 107, Jangwani | 30 | 154042026 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 16, Kigoma | Kigoma | Kigoma | 108, Mwanga Kusini | 30 | 164022001 |
|  |  |  |  |  |  |

| 17, Shinyanga | Bariadi | Bariadi | 109, Sima | 30 | 171073315 |
|---|---|---|---|---|---|
| | S'nyanga | S'nyanga | 110, Old Shinyanga | 30 | 175073303 |
| | Meatu | Meatu | 111, Mwanhuzi | 30 | 176013303 |
| | | | | | |
| 18, Kagera | Bukoba | Bukoba | 112, Miembeni | 30 | 186062007 |
| | | | | | |
| 19,Mwanza | Magu | Magu | 113, Itumbili | 30 | 192093314 |
| | Mwanza | Mwanza | 114, Pamba | 35 | 193042012 |
| | | Mwanza | 115, Pamba | 33 | 193042018 |
| | | Mwanza | 116, Nyamanoro | 33 | 193112009 |
| | | Mwanza | 117, Butimba " a " | 30 | 192022003 |
| | | Mwanza | 118, Mbugani | 30 | 193072028 |
| | | Mwanza | 119, Buzuruga | 30 | 193132035 |
| | Geita | Karumwa | 120, Karumwa | 30 | 196083304 |
| | | | | | |
| 20,Mara | Bunda | Bunda | 121, Bunda | 30 | 205063316 |
| | Musoma | Musoma | 122, Bweri | 30 | 205062003 |

**Appendix 3**

## LISTING FORM FOR HEADS OF HOUSEHOLDS

LABOUR FORCE SURVEY 2000/2001

IDARA YA TAKWIMU

FOMU YA KUORODHESHA WAKUU WA KAYA      S.L.P 796

..      DAR ES SALAAM

Simu 122722/3

MKOA……………………………………….KATA….☐☐☐☐ MIJIN/KIJIJI…..☐☐

WILAYA …………..…..☐☐. EA/ KIJIJI ☐☐☐ UKURASA WA….KATI …YA..…

JINA LA EA/KIJIJI …………………………………………

MDADISI……………………………………….MSIMAMIZI……………………………………….

| NAMBA YA MWANAKAYA | JINA LA MKUU WA KAYA | JINA LA MJUMBE WA SHINA | UTAMBULISHO WA ZIADA | IDADI YA WANAKAYA |
|---|---|---|---|---|
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Jina la Mdadisi ………………………………….Tarehe…../../…. Sahihi…………….

Jina la Msimamizi ……………………………….Tarehe…./…/…Sahihi……………

**Appendix 4**

**LIST OF TECHNICAL COMMITTEE MEMBERS OF THE (ILFS) SURVEY**

| Name | Institution |
|---|---|
| 1.Mr Cletus P.B.Mkai | Director General, National Bureau of Statistics |
| 2.Mr A.Athuman | Director for National Accounts Statistics |
| 3.Mr J.B.Mwinuka | Asst. Director, Planning Commission |
| 4.Mr I.G.Komba | Ag. Head, National Accounts |
| 5.MrA.M.Kaimu | Director for Social Statistics |
| 6.Mr G.K.Ngoi | Ministry of Labour |
| 7.Mr I.Mwenda | Ag. Head, Labour and Price |
| 8.Mr Z.Kilele | Desk Officer  - Labour Force |
| 9.Mr N.T. Buberwa | Computer Programmer |
| 10.Mr Said Nyambaya | Computer Programmer |
| 11.Mr J.N.Kaijage | Ministry of Labour |
| 12.Mrs. J.E.Sawe | Ag. Head, Industry |
| 13. Mr E. Lwakatare | Economist, Ministry of Labour |
| 14.Mr A.J. Masare | Economist, Ministry of Labour |
| 15.Mr E. N.E. Kwesigabo | Desk Officer   - Child Labour |
| 16.Mr Andrea Rossi | ILO Office DSM |
| 17.Mr Said Aboud | Ag. Head, Population Census |
| 18. Mr. K.A. Nilson | Project Co-ordinator, Royal Danish Embassy |