A MEDIUM TERM NATIONAL STATISTICAL PROGRAM FOR ETHIOPIA (2002/03 - 2006/07)

MAIN PROGRAM DOCUMENT
(DRAFT)

VOLUME II

Prepared by:

Ministry of Finance and Economic Development
&
Central Statistical Authority

Addis Ababa
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ABBREVIATIONS

BoP	-	Balance of Payment
CCO	-	Census Commission Office
CIF	-	Cost Insurance Freight
CSA	-	Central Statistics Authority
CSO	-	Central Statistical Office
CTA	-	Coffee and Tea Authority
DAHSI	-	Development Agency for Handicrafts and Small Industries
DAs	-	Development Agents
DHS	-	Demographic Health Survey
DPPC	-	Disaster Prevention and Preparedness Commission
EEPCO	-	Ethiopian Electric Power Corporation
EIGS	-	Ethiopian Institute of Geological Surveys
EMIS	-	Educational Management and Information System
EPC	-	Ethiopian Petroleum Corporation
ERA	-	Ethiopian Road Authority
EVDSA	-	Ethiopian Valleys Development Studies Authority
EWCO	-	Ethiopian Wildlife Conservation Organization
F&M	-	Female and Male
FAO	-	Food and Agriculture Organization
FDRE	-	Federal Democratic Republic of Ethiopia
FOB	-	Free on Board
FSC	-	Federal Sport Commission
FTC	-	Public Transport Corporation
GDCF	-	Gross Domestic Capital Formation
GDP	-	Gross Domestic Product
GDP	-	Gross Domestic Production
GFCE	-	Governmental Final Consumption Expenditure
HSSI	-	Handicraft Small-Scale Industry
IAR	-	Institute of Agricultural Research
ICOR	-	Incremental Capital Output Ratio
MEDaC	-	Ministry of Economic Development and Cooperation
MOFED	-	Ministry of Finance and Economic Development
MOM	-	Ministry of Mines
MOA	-	Ministry of Agriculture
MOE	-	Ministry of Education
MOFA	-	Ministry of Foreign Affairs
MOH	-	Ministry of Health

MOIF	-	Ministry of Infrastructure
MOI	-	Ministry of Information
MOLSA	-	Ministry of Labor and Social Affairs
MOYSC	-	Ministry of Youth, Sport and Culture
MWR	-	Ministry of Water Resources
NATRACOR	-	National Road Transport Corporation
NBE	-	National Bank of Ethiopia
NFIA	-	National Fertilizer Industry Agency
NGOs	-	Non-Governmental Organizations
NMSA	-	National Meteorological Services Authority
NSIA	-	National Seed Industry Agency
OGEDCO	-	Oil and Gas Exploration and Development Central Office
PAs	-	Peasant Associations
PFCE	-	Private Final Consumption Expenditure
PHCC	-	Population and Housing Census Commission
RADBs	-	Regional Agricultural Development Bureaus
REB	-	Regional Education Bureau
RHB	-	Regional Health Bureau
RLSB	-	Regional Labor and Social Bureau
RMEB	-	Regional Mining and Energy Bureau
RSC	-	Regional Sport Commission
RTA	-	Road Transport Authority
SCs	-	Service Cooperatives
SNA	-	System of National Account
SSA	-	Social Security Authority
TGE	-	Transitional Government of Ethiopia
WSSA	-	Water Supply and Sewerage Authority
ZSC	-	Zonal Sport Commission

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PART I

PART 1. BACKGROUND

1. The Evolution of Statistical Services in Ethiopia
2. The Need for and Objectives of the Medium Term National Statistical Program
3. Terms of Reference of the Study Team
4. The Approach
5. The Structure of the Program Document

PART I. BACKGROUND

1.1 The Evolution of Statistical Services in Ethiopia

Though the use of statistical evidence in Ethiopia can be traced back to the sixteenth century, demand for statistical evidences for the purpose of economic management becomes an issue beginning in 1957 when the first five year plan was at its drafting stage. Perhaps in response to this demand, the Central Statistical Office was established three years later in June 1960 under the Ministry of Commerce and Industry of the Imperial Government. This marked the first step in institutionalizing statistical work in Ethiopia.

Despite some minor institutional changes, CSO has remained responsible for statistical activities since then. Among the institutional rearrangements:

- CSO was established as an independent office under the supervision of the Planning Board in January 1963.
- In the period 1966 to 1986 CSO functioned as an autonomous organization under the National Planning Body.
- In 1987 CSO was put under the Council of Ministers Office and was upgraded to a level of authority named as the Central Statistical Authority (CSA).

In Ethiopia statistical law governing the collection, analysis and publication of statistical data was first passed in 1970 which was further amended in 1972 (order No. 79/1972 and proclamation No. 303/72). According to this amendment (which is still at work), the CSA was given the legal provision for the development and organization of statistical work (census and surveys) in the country. The act also charges the CSA to advise government bodies (except Defense and Public Security) on statistical work record with the particular specialization

CSA has accomplished a lot in making available a relatively organized and reliable data in the country. Specifically when we see the accomplishments of CSA over time, it has showed a change of direction from use of administrative records to compile data in external trade, retail trade, and other modern sector activities as well as undertaking ad-hoc surveys and specific area censuses to broad based scientific sample surveys and censuses. Particularly, the 1980's and 1990's signify an important period in the development of statistical work in Ethiopia. Under the umbrella of the National Integrated Household Survey Program (NIHSP), a number of rural and urban household surveys were conducted producing essential

information for economic and social management. During this period, the first Population and Housing Census (1984) in the country's history was conducted. In the 1990s, in addition to the socio-economic statistics made available under regular surveys, the CSA also conducted the Second Population and Housing Census in October 1994. Among the new batches of surveys introduced in recent years include Informal Sector Survey, Distributive Trade and Services survey. Survey on Handicraft and Cottage Industries and Survey on Small Scale Industries, etc. (see Annex 3 for surveys and censuses conducted so far by the CSA).

Apart from data generated through censuses and surveys by the CSA, administrative records of various public institutions were available for economic and social management. The establishment of statistical units particularly in the 1980s in most government ministries and offices was crucial in compiling, processing and dissemination of statistical data in their respective areas of operation. Among these institutions, the following government organizations have managed to produce statistical data reports regularly: the Ministry of Education (MoE), the Ministry of Health (MoH); the Ministry of Industry and Trade (MoIT) (until 1994), the Ministry of Transport and Communication (MoTC) and various authorities under its auspices, the National Bank of Ethiopia (NBE), and the Commercial Bank of Ethiopia.

Sound economic management requires a strong and reliable statistical data. In this regard, the effort made to satisfy this need and the achievements to date can be said satisfactory and even better than a number of Sub-Saharan African Countries. For this, the conducting of population census twice in the past 18 years, the availability of data on agricultural sector through NIHSP, the recently filled statistical gaps through private sector surveys, the regularly available consumer price indices are some of the evidences of the efforts and progress made so far.

1.2 The Need for and Objectives of the Medium Term National Statistical Program

Though the efforts made so far has been encouraging, the ever changing socio-economic reality of Ethiopia calls for robust statistical evidences. Particularly in the present context when Ethiopia is making a determined effort towards liberalizing and decentralizing the state of economic management, the need for a disaggregated, reliable and timely data becomes more important than ever. The availability of and the sustainability in the flow of timely statistical data remains crucial for the purpose of designing programs and formulating sound economic policies and strategies both at federal and regional levels. Moreover, gauging the impact of policy changes via quantitative indicators over time is only possible with the availability of reliable data that reflects the activities of the sector under

consideration. Understanding the breadth and depths of the activities of the emerging private sector also requires uninterrupted and timely flow of basic data on key variables; such as, investment structure and trend, output and value added, sales performance and market outlets. To this effect, data collection, generation, dissemination and reporting systems practiced under the command economic system has to be re-oriented so that proper channeling of administrative and primary data to users both in the public and private sector is possible. In this context, formulation of a comprehensive medium term national program that assesses the existing data base, identifies data gaps and rationalizes the data needs with the available resources is thus a timely initiative.

The Transitional Government of Ethiopia (TGE) recognized the need for a strong statistical database for managing the socio-economic changes taking place in the country. The initiative to undertake the "Statistical Priority" study in 1993/94 by the then Ministry of Planning and Economic Development (now the Ministry of Finance and Economic Development (MoFED) reflected the urgency attached to it. The study was undertaken by a task force of professionals drawn from a number of federal government ministries and offices representing statistical data producers and users.

Though the above study represents the first serious attempt to address the national statistical issue through program approach, it was not exhaustive in identifying statistical gaps and did not suggest strategic action to enhance the functioning of the statistical system. As a result the government decided to revitalize the above attempt by establishing a study team of professionals in 1997.

Accordingly, this exercise basically reflects the Government's effort to address the statistical problem in a more comprehensive and pragmatic approach so that a sustainable data generation, processing and dissemination system shall be in place. Thus, the immediate objective of the program is fulfilling the statistical data requirements essential for planning, policy formulation and economic policy analysis. At the same time the task of overhauling the existing statistical data management systems and mechanisms is believed crucial to ensuring a sustainable flow of statistical data in Ethiopia.

1.3 Terms of Reference of the Study Team

In designing this medium term program, the study team have to undertake among other things, the following key tasks.

a) conduct an extensive review of statistical data requirement for policy formulation, analysis and planning at macro, sectoral and regional levels;

b) assess the existing statistical data base, identify gaps and analyze major problems and constraints of the sector;

c) formulate a prioritized medium term national statistical program and a strategy for its implementation;

d) conduct capacity assessment most importantly of the CSA, and identify resource requirements to realize the medium term program;

e) provide preliminary cost estimate required to implement the Program;

f) review the compatibility of the existing legal and institutional arrangement for the collection, processing and dissemination of statistical information and upon the findings, recommend for its improvement.

1.4 The Approach

From the outset, it is important to define the domain of the program. Under this program, three sources of statistical data were identified. First, data generated from surveys and censuses, second, data compiled from administrative records and third, data obtained through scientific investigations. The data requirement domain is established in this manner for all "macro" and "sector" institutions. The hallmark of this Program Document is the incorporation of users demand in the establishment of data checklists and subsequent program formulation.

The basis for the identification of data gaps in each "sector" begins with review of the presence or absence of a given data apriori identified as essential. Even when the data is available, the question of whether it is available, as required in terms of, say, levels of disaggregation, spatial distribution (national vs. regional), timeliness, reliability, frequency and flow over time were taken as bench-marks while identifying the gaps.

The program formulation process has been further facilitated by categorizing activities or variables into two major groups: macroeconomic statistics and sector statistics. This has helped in tracking down checklists of data requirements and gaps in each category in an exhaustive manner and in devising umbrella programs to meet data requirement in the Medium Term. Thus, macroeconomic statistics are understood in this document as data generated or supplied by macro institutions like the Ministry of Finance and Economic Development (MoFED), the National Bank of Ethiopia (NBE) and the Central Statistical Authority (CSA) through either their respective routine operations or studies.

Sector statistics, on the other hand, followed the traditional activity classifications consisting of Agriculture; Environment and Natural Resources; Industry, Trade and Tourism; Mining, Energy; Water; Construction; Transport and Communication and Social. This setup might not strictly follow the International Standard Industrial Classifications of economic activities. It rather adopts the prevailing organizational structures of Executive Organs of the Federal Democratic Republic of Ethiopia.

Formulation of "macro" and sector programs has been preceded by a thorough assessment of the existing database, review of data requirements and identification of data gaps at the level which is deemed appropriate for the purpose. For instance, National Accounts data requirements are classified into income, output and expenditure components. Government Finance Statistics are reviewed by types of expenditure: recurrent and capital and their respective components. Agriculture sector statistics is also sub-classified as crop and livestock sub-sector statistics. Other sectors also follow the same approach of classification in the process of reviewing data requirements, assessments of databases and identification of data gaps. This has greatly helped identify data checklists at a more disaggrgated level so that availability and gaps are easily discernible to facilitate program design in the case of both primary and administrative sources.

While conducting assessment and formulation of the program, a number of terminologies were used to describe a specific state or condition of the data system. Among these terminologies, the following are believed critical and the context in which they are used is described briefly.

Statistical Gap: Statistical data/indicator that is not available or available but not as desired.

Level of disaggregation: The ideal classification level at which data need to be made available to users (for example in agriculture sector regarding different sectors producer type, crop type, etc.)

Level of Reporting: The minimum administrative set up at which survey/census results need to be reported (wereda, zone, region, National)

Frequency: The periodicity with which surveys or censuses need to be conducted or data need to be reported so that it would be of great significance in informed decision making.

Tolerable Lag: The maximum period of delay allowed for reporting statistical data for immediate economic management.

Lead Focal Institution: The main actor in the supply of survey or census data and generation of data in administrative records.

Focal Institution: An institution or group of institutions evolved directly or indirectly in the collection, processing and dissemination of data in a specific statistical program.

1.5 The Structure of the Program Document

The complete Medium Term National Statistical Program is composed of three parts produced in three volumes.

Volume I: Medium Term National Statistical Program for Ethiopia (1996 - 2000 EFY): Executive Summary;

Volume II: Medium Term National Statistical Program for Ethiopia (1996 - 2000 EFY); Main Program Document

Volume III: Medium Term National Statistical Program for Ethiopia (1996 - 2000 EFY); Legal and Institutional Issues.

The remaining of this document (Volume II) is subdivided in to two major parts. The subsequent part referred as part II is devoted to assess the existing data base and identify gaps and needs under the macro, price and sectoral areas. This is followed by a statistical data gap matrix and a proposed sectoral medium term statistical programs. Part III of this program document is devoted to pull together all sectoral statistical programs, prioritize for implementation, formulate program strategy, and identify resource requirement and provide preliminary cost estimate.

PART II

PART II: AN ASSESSMENT OF THE STATISTICAL DATA BASE FOR PLANNING AND POLICY ANALYSIS IN ETHIOPIA

1. Population Statistics
2. Macroeconomic Statistics
3. Prices-Indices and Household Budget Statistics
4. Agriculture Sector
5. Environment and National Resource Sector
6. Industry, Trade and Tourism Sector
7. Mining Sector
8. Energy Sector
9. Water Sector
10. Construction Sector
11. Transport and Communication Sector
12. Social Sector

PART II: AN ASSESSMENT OF THE STATISTICAL DATA BASE FOR PLANNING AND POLICY ANALYSIS IN ETHIOPIA

1. POPULATION STATISTICS

Population statistics is probably the most widely used statistics serving at least two purposes. First, it is important to understand the level, structure and determents of population dynamics. Moreover, a robust population and demographic data helps in the development of population policy and programs as well as monitor their implementation and evaluate them. Second, population statistics is also a crucial deflator for various economic indicators such as the Gross National Product to arrive at per capita income.

1.1 Review of Statistical Data Requirements

To meet the information demand on population and demographic characteristics of a society, the information should have to be comprehensive, up-to-date and well disaggregated. To this effect, data on population should at least be made available by sex, age, religion, ethnicity, economic activity, marital status, etc. Basically, population data are generated through censuses, surveys, vital statistics registration system and population register. Among the sources census provide a complete population profile of a country and socio-economic status at a given point in time. Population related surveys on the other hand provide detail information on selected demographic aspects of population. Moreover most surveys are conducted between two censuses to ensure the availability of time series information on population. In economically advanced countries, vital registration and population register are effectively used to understand population dynamics and provide a flow of statistics on basic demographic characteristics of the population. Like wise in Ethiopia the need to generate continuos and uninterrupted flow of demographic data is becoming a major concern, that call for the establishment of national vital registration and statistics systems.

1.2 Assessment of the Existing Statistical Data

Prior to 1960, population data in Ethiopia were generated by a number of government and non-government agencies and individuals. Since the establishment of the Central Statistical Office (CSO) (now Central Statistical Authority) in 1960, systematically and scientifically collected and analyzed data were started to be produced. Until 1984 the major sources of demographic data collected by the CSO

were demographic surveys. Since then, however, the two population and housing censuses conducted in 1984 and 1994 has provided the demographic information needed for socio-economic development policies and program design and implementation.

The 1984 Population and Housing Census of Ethiopia is the first census ever conducted in the country. It covered 85 per cent of the total population. The preliminary census results and analytical reports were published and distributed to concerned users of the country. The second population and housing census conducted in 1994 is the most recent sources of demographic data at the moment.

Although the census provided basic demographic data on population size, age-sex structure, geographic distribution, fertility and mortality, etc., there are still important aspects lacking. Among the critical gaps includes, data on forms of migration and information on factors affecting fertility and mortality. Therefore, conducting inter-censal demographic surveys and other specialized surveys, like Demographic and Health Surveys (DHS) to complement the census data becomes necessary. Moreover in order to insure a continuous and uninterrupted flow of demographic data the establishment of a national vital statistics registration system is unavoidable.

Moreover, one of the major areas one cannot find a series of statistics is employment. So far, in recent years, two rural based labor force surveys were conducted that provided information on the economically active population, employment and unemployment in conjunction with the two Population and Housing Census results. Besides, in 1999 the CSA has conducted the first National Labor Force Survey that provided the most essential data on the sector. However, the need to have a continuous employment statistics that would provide current employment data, which, serves to monitor the economic performance of the country, is the major concern of the government.

1.3 Identification of Statistical Data Gaps

The following matrix identifies the present data gap and suggests the forms, timing and frequency to which these data should be made available for the future. The data gap matrix is followed by a statistical program matrix.

1.4: Statistical Data Gap Matrix - Population

No.	Indicator/Data	Statistical Gap	Required form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
1	Population size	Available (1994 census)	Sex/Age/ Age-group/ occupation/ family size/ household	National, regional, zonal, woreda, kebele (rural/urban)	Every 10 years	One year	CCO/CSA	Census/Survey
2	Population distribution	Available (Census)	Sex/Age/ Age-group/ occupation/ family size/ household	National, regional, zonal, woreda, rural, urban	Every 10 years	One year	CCO/CSA	Census/Survey
3	Fertility	Available	Socio-economic groups and variable	National, regional and zones	Every 5 years	Six months	CCO/CSA, MOH	Census/Survey/VSRS
3.1	Levels	Available	Socio-economic groups and variable	National, regional and zones	Every 5 years	Six months	CCO/CSA, MOH	Census/Survey/VSRS
3.2	Trends	Available	Socio-economic groups and variable	National, regional and zones	Every 5 years	Six months	CCO/CSA	Census/Survey/VSRS
3.3	Differentials	Available	Socio-economic groups and variable	National, regional and zones	Every 5 years	Six months	CCO/CSA, MOH	Census/Survey/VSRS

1.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
4	Mortality	Available	Socio-Economic group and variables	National, regional and zones	Every 5 years	Six months	CCO/CSA, MOH	Census/Survey/VSRS
4.1	Infant and child mortality	Available	Age/sex/ occupation/ education level	National, regional and zones	Every 5 years	Six months	CCO/CSA, MOH	Census/Survey/VSRS
4.2	Differentials	Available	Age/sex, occupation/ education level	National, regional and zones	Every 5 years	Six months	CCO/CSA, MOH	Census/Survey/VSRS
4.3	Maternal mortality	Available	Socio-economic groups and variables	National and regional	Every 5 years	Six months	CCO/CSA, MOH	Specialized Survey/VSRS/ Adm. Rec.
4.4	Life expectancy	Available	Sex, education and occupation	National, regional and zones	Every 2 years	Six months	CCO/CSA	Census/Survey/VSRS
5	Migration	Available	Age/sex/ education/ occupation	National, regional and zones	Every 2 years	Six months	CCO/CSA, MOFA	Census/ Survey/VSRS/ Adm. Rec.
5.1	Internal	Available	Age/sex/ education/ occupation	National, regional and zones	Every 2 years	Six months	CCO/CSA, MOFA, DPPC	Census/ Survey/Adm. Rec.
5.2	International	Partially Available	Age/sex/ education/ occupation	National, regional and zones	Annually	One year	CCO/MOFA, CSA, DPPC	Census/ Survey/Adm. Rec.
6	Fertility regulation	Available	Socio-economic status	National, regional and zones	Annually	Six months	CCO/CSA, MOH	Survey/VSRS/ Adm. Rec.
6.1	Knowledge of FP	Available	Socio-economic status	National, regional and zones	Annually	Six months	CCO/CSA, MOH	Survey/ Adm. Rec.
6.2	Use of FP (CPR)	Available	Socio-economic status	National, regional and zones	Annually	Six months	CCO/CSA, MOH	Survey/ Adm. Rec.
6.3	Sources of FP	Available	Socio-economic status	National, regional and zones	Annually	Six months	CCO/CSA, MOH	Survey/ Adm. Rec.

1.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required form and Frequency				Focal Institution	Remark
			Level Of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
7	Marital Information (Nuptiality)	Available	Sex/age/ occupation education etc.	National, regional and zones	5 years	Six months	CCO/CSA	Census/Survey/VSRS
7.1	Age at first marriage	Available	Sex, occupation and education etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/CSA, MOH	Survey/VSRS
7.2	Age at first birth	Available	Occupation, education, ...	National, regional, and Urban/Rural	5 years	Six months	CCO/CSA, MOH	Survey/VSRS
8	Maternal and child health	Available	By age, sex, type etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/CSA, MOH	Survey/VSRS/ Adm. Record
8.1	Antinatal care	Available	By age, sex, type etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/CSA, MOH	Survey/VSRS/ Adm. Record
8.2	Delivery care	Available	By age, sex, type etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/CSA, MOH	Survey/ VSRS/ Adm. Record
8.3	Vaccination	Available	By age, sex, type etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/CSA, MOH	Survey/ VSRS/ Adm. Record
8.4	Childhood illness and treatment	Available	By age, sex, type etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/CSA, MOH	Survey/ VSRS/ Adm. Record

1.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required form and Frequency				Focal Institution	Remark
			Level Of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
9	HIV/AIDS	Available	By age, sex, etc.	National, regional and Urban/Rural	5 years	Six months	CCO/MOH/ CSA	Survey/ Adm. Rec.
9.1	Knowledge (HIV/AID)	Available	By age, sex, etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/MOH/ CSA	Survey/ Adm. Rec.
9.2	Effectiveness of Health Education	Partially Available	By age, sex, etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/MOH/ CSA	Survey/ Adm. Rec.
9.3	Prevalence rate	Partially Available	By age, sex, etc.	National, regional, and Urban/Rural	5 years	Six months	CCO/MOH/ CSA	Survey/ Adm. Rec.
10	Gender Statistics	Partially Available	Socio-economic variables	National, regional, zonal, woreda, rural, urban	5 years	Six months	CCO/CSA, MOH, WAO, WID Units	Census/Survey/ VSRS/ Adm. Rec.
10.1	Women's participation in school at all levels	Partially Available	By grade, level etc.	National, regional, zonal, woreda, rural, urban	5 years	Six months	CCO/CSA, MOH, WAO, WID Units	Census/Survey/ VSRS/ Adm. Rec.
10.2	Women's role/labor force in all the economic sector	Partially Available	By activity, sector	National, Rural, urban, and selected region	5 years	Six months	CCO/CSA, MOH, WAO, WID Units	Census/Survey/Adm. Rec.

1.5: Medium Term Statistical Program Matrix - Population

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Demographic and Health survey (DHS)	Compressive reliable & timely data are not adequately made available for policy and program design	Resource limitation	To generate timely, reliable, and disaggregated socio-economic, demographic data at national and regional levels	Building capacity for properly conducting the survey, adequately analyze and timely disseminate	Analytical report and disaggregated data on the respective areas	Data collection, processing, analysis, report publication and dissemination	CCO/CSA	Survey
2	Labor Force Survey	Comprehensive and reliable & timely data are not adequately available for policy and program design	Resource limitation	To generate timely, reliable, and disaggregated socio-economic demographic data at national and regional levels	Building capacity for properly conducting the survey, adequately analyze and timely disseminate	Analytical report and disaggregated data on respective fields	Data collection, processing, analysis, report publication and dissemination	CSA/ CCO/MOLSA	Survey

1.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
3	Migration survey	Comprehensive and reliable & timely data are not adequately available for policy and program design	Respondents not familiar with the recent administrative changes (observed during, 1994 census pilot)	To generate timely, reliable, and disaggregated socio-economic and demographic data at national and regional levels	Building capacity for properly conducting the survey, adequately analyze and timely disseminate	Analytical report and disaggregated data on respective fields	Data collection, processing, analysis, report publication and dissemination	CCO/CSA	Survey
4	Vital Statistics Registration System	Reliable & timely vital statistics data on continuos basis are not adequately available for policy and program design, specifically at the lower administration	Resource limitation, trained manpower and prevalent of illiterate population,	To generate timely, reliable, continuos and disaggregated vital statistics data at national, regional, zone, wereda and lower administrative levels	Building capacity for establishing conventional vital statistics and registration systems;	Analytical report and disaggregated data on respective fields	Study the legal, organizational and administrative setup of the systems, study and organize the technicalities of vital statistics data collection, processing, analysis, publication and dissemination	CCO/Federal Affairs Minister/CSA/ various Legal and Administrative Institutions	Initially on the basis of experimental sites but gradually develop to the conventional civil registration and vital statistics system

1.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
5	Intercensal Demographic Survey	Reliable & timely data are not adequately available for policy and program design		To generate timely, reliable, and disaggregated socio-economic and demographic data at national and regional levels	Building capacity for properly conducting the survey, adequately analyze and timely disseminate	Analytical report and disaggregated data on respective fields	Data collection, processing, analysis, report publication and dissemination	CCO/ CSA	Survey
6	Population and Housing Census	Reliable and timely data need to be available for policy and program design		To generate timely reliable and disaggregated socio-economic and demographic data at national and regional levels	Building capacity for properly conducting the census, adequately analyze and timely disseminate	Analytical report and disaggregated data on respective fields	Data collection processing, analysis, report publication and dissemination	CCO/CSA	Survey

2. MACROECONOMIC STATISTICS

The concept of macroeconomics basically refers to a study of economic aggregates involving analysis of the causes of changes and prediction of the consequence of recent developments or policies. The information required and the approach to compile macroeconomic aggregates follow a universal standard developed by the UN and International Financial Institutions. According to the International Financial Statistics (IFS) of the IMF (a framework developed in accordance with the sprit and guideline provided by SNA), four principal set of accounts form macroeconomic data system representing an economy's resident transactions and transaction with the rest of the world. These accounts are, the National Income and product accounts; the Balance of Payments accounts; the Government Finance Statistics (GFS) and the Monetary account.

This section attempts to look into each of the above accounts, review the data requirements, assess the state of these accounts in Ethiopia and identify data gaps; and subsequently suggest a medium term statistical programme for their improvement.

2.1 Review of Statistical Data Requirements

2.1.1 National Account

Probably the most comprehensive macroeconomic aggregate is the National Income and Product account as it provides measurements of the aggregate value of the macroeconomic activities that take place in a country/region during a specific period of time. A complete system of National Accounts provide answer to basic economic questions including what is produced, how it is produced, which are the producing sectors, how much is saved and invested and how are the share of income divided among factors of production.

The presence of a comprehensive and reliable system of accounts help to derive major macroeconomic parameters including Marginal Property to Consume (MPC), Marginal Propensity to Save (MPS) and Incremental Capital Output Ratio (ICOR). These parameters can be computed for the overall economy or for each sector as well as for institutional units (i.e. Household, Government, Non-profit Institutions and Private Business) provided that basic data (ingredients) are made available regularly. In the absence of detailed output data for sub-sectors or institutional units, it would not be possible to compute output indirectly unless a reliable ICOR is established at national level.

There are a wide range of users of National Accounts Statistics both at national and international level. Judging from the demand pattern of users of national accounts statistics, the following "needs" have been identified:

Gross Domestic Product by Economic Activity: at current basic prices, and at constant basic prices

Gross Domestic product By Expenditure Aggregates: at current market prices, and at constant market prices

Value Added By Income Components or Factor Shares: at current basic prices (nominal income), and at constant basic prices (real income). These factor income components of Value Added are described in broad categories as follows: compensation of employees (wages and salaries plus benefits both in cash and in kind), operating surplus, and depreciation.

Gross Domestic Capital Formation (including change in stocks) by ownership: Statistics on Gross Domestic Capital Formation being a component of GDP at market prices, is singled out here to emphasize its importance as it is frequently demanded by users for the purpose of policy formulation and strategy design as well as a performance measurement. The most common components of GDCF are the followings. Private Gross Domestic Capital Formation at Current Market Price, Public Gross Domestic Capital formation at Current Market Price, Private Gross Domestic Capital Formation at constant Market Prices, and Public Gross Domestic Capital Formation at Constant Market Prices.

GDP by type of transactions: Monetized GDP (Marketed GDP), and Unmonetized GDP (Non-Marketed GDP). Inflation being a key policy variable is largely influenced by the extent to which the economy is monetized or non-monetized. If the economy is largely monetized the impact of any macroeconomic measure on inflation can easily be discerned. Hence such distinction in measuring economic activity is of paramount important in a subsistence economy.

GDP by the three approaches based on uptodate Base Year: One of the recognized methods of computing GDP in real terms, which is a pre-requisite to compute basic indicators like growth rates of GDP and per capita income. This in turn requires valuing current output at base year prices.

2.1.2 Public Finance

The measurement of government activities is essential for a broad range of analytical purpose including in understanding the role of the government in stabilization of macroeconomic disequiliruias and acceleration of economic and social development. For this, the compilation of GFS must meet various requirements from the standpoint of each user's as regard to its scope, kind and characteristics of the data, the recording dates, frequency and disaggregation levels.

From the outset, it is important to consider certain principles in measuring government activities. As per the IMF definition, the broadest definition of government, (general government) incorporates central government; state, provincial or regional governments, local governments, and any supranational authorities exercising functions relating to government activities. According to this definition, public enterprises and government controlled financial institutions are considered outside the government sector.

The second principle in measurement of GFS is that government transactions should be recorded on cash bases. Such method helps among other things, to avoid problems of evaluation and while corresponds closely with other financial statistics. The third principle suggests that non-industrial receipts and payments should be shown on gross bases, so that the data will reflect the full magnitude and impact of the raising revenue and its disposition. Fourth, it is necessary to eliminate transactions between all units within the government itself in compiling GFS.

The universally adopted GFS compilation approach mentioned above recognize five categories of government transactions: revenue, grants, expenditure, lending mines repayments, and financing.

Revenue: It includes all non-repayable receipts, requited and un requited, other than grants from other governments and international institutions. Thus, the statistics on revenue include data on current revenue (all tax and current non-tax revenue) and capital revenue (revenue from government sales of fixed capital asset, land, etc.).

Grants: It refers to unrequited, non-repayable, non-compulsory receipts (net) from other governments (domestic and foreign) and international institutions.

Expenditure: According to the above approach of measuring GFS, expenditure includes all non-repayable payments by government, whether requited or unrequited and whether for current or capital purpose. There are two approaches of recording expenditure, the economic effect and the purpose or function classifications.

Lending minus repayments: This covers both debt and equity of the government transaction.

Financing: Here two aspects of the statistics are important. Items known as "above the line". An overall budget deficit or surplus defined as difference of revenue and expenditure while items classified as "below the line" measuring how the above deficit is financed.

From the National Account perspective, data on public finance are important inputs in the compilation aggregates like government final consumption expenditure (GFCE), GDCF, value added from public administration and defence as well as education and health.

Detailed and consolidated data on the implementation of capital budget by sector and code of expenditure also help to estimate gross domestic fixed investment by general government. Data on this component of capital budget would also be of help to estimate factor payments like wages and salaries incurred on economic activities carried out or services rendered in the given accounting period.

2.1.3 The Balance of Payments (BOP)

According to the IMF framework, the BoP is defined as a statistical statement for a given period showing:

- transactions in goods, services, and income between an economy and the rest of the world (row);
- change of ownership and other changes in that economy's monetary gold, special drawing rights (SDRs), and claims on and liabilities to the ROW, and
- unrequited transfers and counterparts entries that are needed to balance.

Broadly, the transactions in the BoP is classified in to two: current account transactions and capital account transactions.

Current account: It is made of transactions including, exchange of goods, services income and unrequited transfers.

Capital account: It covers transactions in financial assets and liabilities. The detail recording of this account is further dissagregated by function (reserve, direct investment capital, portfolio capital and other capital), by length of maturity and asset and liability.

From the NA perspective, basic statistical data on the external sector complement GDP compilation by expenditure. The following list of external data represent data needed for the completion of GDP at current market prices.

- Value of merchandise exports by type of goods.
- Quantity of merchandise exports by type of goods
- Price (FOB) of merchandise exports by type of goods
- Value of merchandise imports by type of imported goods by end use
- quantity of merchandise imports by type of good and end use
- Price of merchandise imports (CIF) by type of good by end use
- Value of export of non-factor services by type of services
- Receipts per unit of services exported
- Value on imports of non-factor services by type of service
- Payments per unit of service imported
- Unit value of exports (merchandise)
- Unit value of imports (merchandise)
- Unit value of exports (service)
- Unit value of imports (service)
- Receipts of factor income:
  - labor income
  - interest income
  - other income
- Payments of factor income:
  - labor income
  - interest income
  - other income
- Unrequited private current transfers received from:
  - NGOs

- Individuals (Ethiopians Vs foreigners)
- Others (specify)

- Unrequited private current transfers paid to (if any)
  - NGOs
  - Individuals (Ethiopians Vs foreigners)
  - Others (specify)

- Unrequited Private capital transfers received from:
  - NGOs
  - Individuals (Ethiopians Vs foreigners)
  - Others (specify)

- Unrequited private capital transfers paid to (if any)
  - NGOs
  - Individuals (Ethiopians versus foreigners)
  - Others (specify) if any

- Official transfers received
- Official transfers made (if any)

2.1.4 The Monetary Accounts

This is one of the four pillars of the macroeconomic data system representing transaction of assets and liabilities of financial institutions . Basically, there are two sub-groups of financial institutions, Monetary and non-monetary financial institutions. According to the International Financial Statistics (IFS) of the Fund, the monetary and financial data needed for economic analysis are represented on three levels.

Account of the Monetary Authorities (MAs): This account form a set of data for timely evaluation of monetary developments including change in reserve and money supply.

Monetary Survey (MS): This level contains transaction data for the monetary authorities and deposit money banks (DMBs) and measures money and credit.

Financial Survey: This account basically is the broadest including, activities of non-monetary financial institutions (NFIs) in addition to MS. The data compiled under this survey helps to measures financial positions such as, overall private

sector liquidity and help in understanding relationship between the financial sector with the rest of the economy.

The Monetary Survey is the most commonly used financial account for economic analysis and the following are its major components.

- Net foreign assets
- Domestic credit
- Broad money (M2)
- Narrow money (M1)
- Currency and Demand deposit
- Quasi money

2.2 Assessment of the Existing Statistical Data

2.2.1 National Accounts

It goes without saying that the status of National Accounts Statistics is dictated by the availability as well as uninterrupted flow of basic statistical data at micro/sectoral levels. Here, it is attempted to address the shortcomings of the prevailing national accounts statistics from the point of view of "non-availability" and "available but not as desired" criteria. This problem could be largely explained by the paucity of the requisite basic comprehensive information and its flow in a timely manner.

Gross Domestic Product by Economic Activity: Currently the GDP measure that is being made available regularly is Value Added at 1980/81 constant factor cost (basic price) whose base year is still too old to reflect current circumstances. Moreover, some sectors' value added is estimated still based on proxy statistics (rural water, quarrying, rural construction, etc.) and need to be revised when basic data on those areas of activities are made available from surveys to be conducted subsequently. At present, value added at current basic prices is made available with a lag of utmost one year in the case of agriculture (crop sub-sector for major crops), and Large and Medium Scale Manufacturing Industries and utmost two years for Public Administration and defence. There used to be sectors for which no survey or census data have been made available up until the one time surveys conducted for the fiscal year 1995/96 and recently for the fiscal year 2002/03 on small scale industries (urban), Handicraft Cottage Manufacturing Industries, Distributive and Service Trade, and Informal sector surveys.

Thus, the most common problem of statistical data shared by many of the sectors in Ethiopia is timeliness. Therefore, a lot needs to be done to improve the flow of value added statistics for each sector of the economy at both current and basic prices and in real terms by economic activity.

GDP at Current Market Prices (Expenditure Side Aggregates): Private final Consumption Expenditure (PFCE), Government Final Consumption Expenditure (GFCE), Gross Domestic Capital Formation (GDCF), Exports of Goods and Non-factor services and Imports of Goods and Non-factor services are made available fairly regularly, of course, being determined by the timeliness of GDP by economic activity. However, PFCE is still being determined as residual. Attempt was made during the 1994 revision to estimate independently for the period 1980/81 to 1993/94.

Among the data inputs used to estimate GDCF in Ethiopia industry data on the implementation of capital budget by code of expenditure for the public sector, import statistics on the purchase of machinery and equipment, data on newly constructed urban residential and non-residential buildings, statistics on building permits from municipalities (Addis Ababa Administration) and population census statistics on population size and average number of persons per housing unit by urban and rural areas (1984 and 1994 census) which enabled to establish the housing stock for each year.

The estimate GDCF in Ethiopia has the following limitation. An assumed replacement rate of rural houses established through consultation with experts in the field has helped establish annual number of housing units constructed in each year. As average construction cost of typical housing units in rural areas has been based on proxy statistics, the rural housing construction component of Gross Fixed Investment has not been based on firm data.

Moreover, data on inventories (stock changes) which are components of GDCF are not regularly made available barring large public enterprises. Hence, the GDCF estimates of Ethiopia need to be further refined and improved based on survey/census data. Data on exports of goods and non-factor services and imports of goods and non-factor services are being made available regularly (annually) by the Central Statistical Authority, the National Bank of Ethiopia and the Customs Authority. They themselves are not without shortcomings and this will be fully addressed in the Balance of Payment section. The two-year lag in GFS also stood as one of the problem in producing final estimates of GDCF on time.

Further, GDP in real terms by expenditure aggregates is non-existent. Appropriate deflators are needed to transform current price aggregates (components of GDP) in to real GDP aggregate.

In order to gauge the performance of the newly emerging private sector in terms of its contribution to national output and Value Added; the value, volume and structure of private sector investment is of paramount importance. Such data are not currently available at national level. Had the public sector GDCF been estimated based on a comprehensive and firm data and the national GDCF fine-tuned, the private sector GDCF would have been computed as a residual in the absence of basic information to compile private sector GDCF.

Currently the overall GDS is computed as a residual further constraining macroeconomic analysis. Therefore it needs to be computed independently by type of savers: Government (Public), Private Business, Households and Non-Profit Institutions Serving Households (NPISHs). Moreover, data on net factor income from abroad is not reliable and GDS is not well established, the magnitude of Gross National Savings (GNS) could not be figured out with certainty.

Income Aggregates: GDP by income approach or factor shares would be of much help to measure the relative contributions of factors of production in the generation of total output as well as the distribution of income among these factors. So far, value Added measure by factor incomes both at current and constant prices has not been made available.

If GDP by the three approaches mentioned above was available, it could also be possible to evaluate the degree of reliability of the national accounts estimates of Ethiopia.

To sum up, apart from limitations in available estimates of GDP components, the absence of a complete system of NA, that is GDP by the three approaches limit the scope for building economic models for planning and policy analysis. Moreover, the degree of reliability of NA estimate could be evaluated and the necessary supply and demand consistency be mentioned with the introduction of the complete system. One of the recent phenomena that created additional demand for data in Ethiopia is the increasing involvement of Regional Governments in Managing their own economic affair. Particularly, constructing Regional Income Account (RIA) has become one of the major concerns of various regional governments and the attempt to estimate already is underway in most regions. However, both methodological and data problems needs to be addressed adequately to ensure a reliable and consistent regional accounts.

2.2.2 Public Finance

Overall consolidated expenditure statements (including all regions) are currently made available with a lag of two years. However, actual Expenditure statements for the federal government are currently being made available with a lag of one year. Besides this, some components of recurrent budget as being reported in several official MoF documents need some more degree of disaggregation so that it can readily be used in the compilation of national accounts aggregates. For instance, the "grants and contributions" item as described above should have been disaggregated into wages and salaries, materials and supplies as well as transfer payments by user institutions. Considering these components of recurrent expenditure, they need further decomposition so as to readily compile gross value of output and hence value added from current payments made against current activities.

On the other hand, a comprehensive and consolidated capital expenditure data by sector and code of expenditure is not made available on time particularly for externally financed projects.

With regard to self financing organization, no profit and loss statement has so far been furnished by municipalities except Addis Ababa Administration. Only fragmented revenue and expenditure data for some municipalities are reported on the CSA Annual Statistical Abstracts.

Data on recurrent expenditure as per the existing Ministry of Finance (MoF) format is very useful for the compilation of GFCE and value added for public administration, education and health. The present MoF recurrent expenditure (cordinary budget allocated) reporting format looks like the following:

- Wages and Salaries
- Materials and Supplies
- Grants and Contributions
- Subsidies
- Pensions
- Domestic interest paid
- External interest paid
- External assistance (goods provided in kind through external grants for drought relief)

From the present practice, portion of external assistance is allocated for recurrent budget. This data would be necessary to compute value added from the activities for which this portion of the resource is allocated for current activities during the period of accounting usually one year. Moreover, the "grants and contribution" component of the recurrent budget is needed to discern the portion which is a pure transfer and allocated to finance current activities carried out in the fiscal year under consideration.

2.2.3 The Balance of Payments

Although the external sector databases are relatively well established, improvements still needs to be made in terms of levels of disaggregation, timeliness* and comprehensiveness. As statistics on external sector variables like value of exports and prices that our export items fetch in the international market, are key for policy decision; timeliness is very crucial to judge the usefulness of the current flow of external trade statistics. In light of this, the following paragraphs briefly discuss the existing data gap of BoP statistics in Ethiopia.

- Despite lack of timeliness, data on value of exports by type of goods and quantity of merchandise exports by type of goods are currently being reported by the NBE and Custom Authority as required. However, as current minimum data requirement on these items is on quarterly basis at the very least, this should be thoroughly considered to meet such an ideal target.

- Statistics on value and quantity of merchandise imports by type of goods and by end use are also reported relatively regularly as required at least for the compilation of National Accounts. However, cereal imports especially in times of drought needs further disaggregation into relief grants and cereal imports for which payment in foreign exchange is effected. Moreover, actual import data is made available by customs with considerable delay.
- Statistics on value of export and imports of non-factor services by type of services are also available fairly regularly. However, the timeliness problem still remains outstanding.

- Statistics on unit value of services exported and imported are not available in NBE documents.

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[1]* Timeliness is a common shortcoming that applies to all data items described above.

- Complete data on unit values/prices for export and import commodities are not being made available in official NBE documents.

- Statistics on receipts and payments of factor incomes (labour and interest income) are not complete as currently reported in NBE documents. Data on interest income is reported under the current account although receipts and payments are not separately described. Rather the net figure is reported.

- Both the private unrequited transfers and official transfers items of the BoP as being currently reported do not seem to distinguish items of current and capital nature as some of the components of these two groups of transfers are not sufficiently disaggregated (especially the "other" component of the official transfers) so that items of capital and current nature are easily identified for the computation of the Gross National Disposable Income aggregate of the National Accounts. Establishing this aggregate on firm data would help determine the magnitude of Gross National Savings of the country with reasonable accuracy.

2.2.4 Monetary Accounts

Probably this account is relatively better in terms of reliability and completeness. However, given the administrative record nature of the statistics and the urgency attached to this account for monitoring short-run changes in the financial sector, the current lag in reporting these statistics needs to be lowered to not more than one month. The problem is more profound with respects to data on the activities of deposit banks and NFIs.

2.3 Identification of Statistical Data Gaps

The above discussions have helped identify the following data gap in each sub-sector of the macro economy: National Accounts, Government Finance and the Balance of Payments and monetary accounts. Subsequently a set of statistical programs for all macroeconomic accounts have been proposed taking in to account the present demand for macroeconomic statistics to effectively manage the ongoing reform program.

2.4 Statistical Data Gap Matrix - Macroeconomic Statistics

2.4.1 National Accounts

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disagggregation	Level of Reporting	Frequency	Tolerable Lag		
1	GDP by Economic Activity							
	– Current basic prices	Not as required	By industry	National/ Regional	Quarterly	1 quarter	MoFED	
	– Constant basic price	Not as required	By industry	National/ Regional	Quarterly	1 quarter	MoFED	
2	GDP by Exp. Components							
	– Current market price	Not as required	By inst. units	National/ Regional	Quarterly	1 quarter	MoFED	
	– Constant price	Not available	By inst. units	National/ Regional	Quarterly	1 quarter	MoFED	
3	GDP by Income Approach							
	– Current factor cost	Not available	By factor income recipients	National/ Regional	Quarterly	1 Quarter	MoFED	
	– Constant factor cost	Not available	By factor income recipients	National/ Regional	Quarterly	1 Quarter	MoFED	

2.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disagggregation	Level of Reporting	Frequency	Tolerable Lag		
4	Gross Domestic Capital Formation							
	– Private GDCF	Not available	By asset type	National/ Regional	Annually	One quarter	MoFED	
	– Public GDCF	Not available	By asset type	National/ Regional	Annually	One quarter	MoFED	
	– ICOR	Not available	By sectors	National/ Regional	Annually	1 year	MoFED	
5	GDP by type of Transaction	Not as required	By sector or Institution unit	National/ Regional	Annually	One quarter	MoFED	
	– Monetized	Not as required	By sector or Institution unit	National/ Regional	Annually	One quarter	MoFED	
	– Unmonetized	Not as required	By sector or Institution unit	National/ Regional	Annually	One quarter	MoFED	
6	Gross Domestic Saving	Available but not as required	– Public sector – Business – Households	National/ Regional	Annually	One quarter	MoFED	
					Annually	One quarter	MoFED	
					Annually	One quarter	MoFED	
7	Gross National Saving	Not as required	Overall	National/ Regional	Annually	One quarter	MoFED	
8	Regional Income Accounts	Not Available	-	By region	Annually		Regional Finance & Planning Bureau / MoFED	

2.4: (Cont'd)

2.4.2 Public Finance

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disagggregation	Level of Reporting	Frequency	Tolerable Lag		
1	Revenue and Expenditure Performance of Self-financing organizations	Not available	As per MOF format for ordinary Budget allocated	National	Quarterly	1 quarter	The respective organizations and MoFED	
2	External Assistance Allocated for Recurrent Budget	Available but not as required	As per MOF format for ordinary Budget allocated	National Level/Regional	Quarterly	1 quarter	MoFED	
3	Ordinary Budget Unallocated by Economic Classification	Available but not as required	As per MOF format for ordinary Budget allocated	National Level/Regional	Quarterly	1 quarter	MoFED	
4	Capital Expenditure by Sector	Available but not as required	By code of expenditure and sector	National Level/Regional	Annually	One quarter	MoFED	

2.4: (Cont'd)

2.4.3 Balance of Payments

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disagggregation	Level of Reporting	Frequency	Tolerable Lag		
1	Volume of Exports and Imports							
	– Exports of goods	Not complete	– By Commodity	National	Quarterly	1 Quarter	CSA/ NBE/ CUSTOMS	
	– Imports of goods	Not complete	– By Commodity	National	Quarterly	1 Quarter	NBE/ CUSTOMS	
2	Value of Exports and Imports	Lack of:						
	– Export of goods	– Timeliness	Commodity level	National	Quarterly	1 Quarter	CSA/ NBE/ CUSTOMS	
	– Export of services	– Timeliness	Commodity level	National	Quarterly	1 Quarter	NBE/ CUSTOMS	
	– Import of goods	– Timeliness	Commodity level	National	Quarterly	1 Quarter	NBE/ CUSTOMS	
	– Import of services	– Timeliness	Commodity level	National	Quarterly	1 Quarter	NBE/ CUSTOMS	
3	Factor Income							
	– Credit (received)	– Not Comprehensive	– By income earners	National	Quarterly	1 quarter	NBE	
	– Debit (paid)	– Not Comprehensive	– By income recipients	National	Quarterly	1 quarter	NBE	
4	Official Transfer	Lack of disaggregation	– Capital	National Level	Quarterly	1 Quarter	NBE	
			– Current					
				National Level	Quarterly	1 quarter	NBE	
					Quarterly	1 quarter	NBE	
					Quarterly	1 Quarter	NBE	
5	Private Transfer	Lack of Disaggregation	– Workers' remittances	National Level	Quarterly	1 quarter	NBE	
			– Receipts of Aid from NGOs	National Level	Quarterly	1 quarter	NBE	
			– Factor payment	National Level	Quarterly	1 Quarter	NBE	

2.5: Medium Term Statistical Program Matrix - Macroeconomic Statistics*

2.5.1: National Accounts

No.	Statistical Program	Problems the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Compilation of the Full Sequence of Accounts	A complete system of NA has not been realized in Ethiopia. Particularly, there is no income account and from the expenditure side, private expenditure estimate is weak. The absence of capital account most importantly, GDCF by ownership, by sector and type of asset hinders effective planing	– Poor data base – Absence of a sustainable data flow system – Weak institutional capacity	Estimate the full sequence of accounts and compute GDCF by ownership, type of Fixed Assets and, sectors so that a comprehensive macroeconomic policy analysis shall be exercised	– Strengthen data base – Establish a sustainable data flow system – Strengthen the capacity of NA team in MEDaC	The full sequence of accounts as per the 1993 SNA and, a dissaggregated GDCF (yearly)	– Implement this statistical program so that the necessary data requirement will be fulfilled. – Establishing a sustainable data flow system – Build a sustainable NA computing capacity – Acquire technical assistance to improve the methodology	MoFED	Immediate action is required to improve the production and expenditure side estimates with recently available survey results. This may include, revising the base year, compilation of capital account. The recent effort to estimate GDCF by type of assets, ownership and economic sector should be encouraged and sustained

* All programmes are administrative records.

2.5: (Cont'd)

No.	Statistical Program	Problems the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
2	Regional Income Account (RIA)	So far there is no RIA estimate available	It is a new exercise. Preliminary observation detected problems in the areas of : – data base, – methodology, – absence of a clear Institutional arrangement for estimation – capacity constraint	To introduce RIA in all regions at least in the supply side so as to enhance regional governments' economic management capacity	– Seek technical assistance – Develop a standard guideline for estimation – Review and improve regional data base – Build capacity – Define the institutional arrangement for estimation – Estimate RIA	RIA (at least the production side) for most of the regions (annually)	– The immediate activities include, – Seek TA support to conduct a study and prepare a project to introduce RIA in Ethiopia. – Implement the recommendation	MoFED and Regional Finance & Planing Bureau	This program requires urgent attention to augment the effort so far made to estimate RIA in some of the regions.

2.5: (Cont'd)

2.5.2: Government Finance

No.	Statistical Program	Problems the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Compilation of Data on Expenditure and Revenue Performance of Self-financing Organization	Not available	Absence of reporting mechanism	To establish a regular and sustainable data generation and dissemination mechanism regarding self-financing organizations.	– Standardize data reporting formats. – Introduce a regular system within the MoF to produce financial report on self-financing organizations	A quarterly financial report on self-financing organizations with no more than one quarter lag	– Design a standard data reporting format – Establish a system of reporting within MoF	MoFED & respective institutions (Regional Finance & Planning Bureaus)	MoF needs to take immediate step to adopt the recommendation

2.5: (Cont'd)

No.	Statistical Program	Problems the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
2	A comprehensive and well dissaggrgated Government Finance Statistics (GFS)	The presently compiled GFS has the following limitations: – The data on external ass. allocated for recurrent budget is not as per MoF format used for reporting ordinary budget. – Data on recurrent budget(Unallocated) by economic classification is arbitrarily set using ratios – Utmost 2 years of lag in reporting detailed and consolidated data on recurrent and capital expenditure performance by code of expenditure.	The major reasons may include: – Capacity limitation – Delay in data flow from regions	To improve the content and timeliness of GFS so that NA estimate will be improved and public expenditure management enhanced	Standardize reporting formats and enhancing GFS compiling capacity.	Initially, improved GFS (annually) data with no more than 6 months of lag. And by the end of this prog period, a quarterly and regionally dissaggregated GFS with improved content and with no more than one quarter lag.	– Review the present GFS so as to standardize reporting format – Assess the existing public capital expenditure data flow system – Enhance the capacity of MoF, MEDaC and concerned regional bureaus as to reduce the time lag.	MoFED and Regional Finance & Planning Bureaus	

2.5: (Cont'd)

2.5.3: Balance of Payments and Monetary Statistics

No.	Statistical Program	Problems the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Compilation of BoP Statistics	– The presently compiled BoP has the following limitations: – Timeliness – Transfers are not dissaggregated as required and, – Factor income data are not comprehensive	– Lag in getting data – Capacity limitations	To improve the content and timeliness of BoP statistics.	– Complete the introduction of ASYCUDA – Strengthen NBE	Quarterly BoP	– Need to review the currently used data reporting formats and system – Improve data processing and reporting capacity	NBE/ Customs Authority/ CSA	
2	Monetary Survey and data on the activities of the financial sector	Timelines	Capacity limitations	Sustain the present flow of Monetary Survey data on banking sector activity	– Progressively improve the system of data flow from CBEs – Enhance the capacity of NBE	Monthly Monetary Survey and financial sector activity report.	– Regularly review data reporting system from the CBEs – Enhance NBE capacity	NBE	

3. PRICES, INDICES AND HOUSEHOLD BUDGET STATISTICS

Understanding the behavior of markets basically revolves around the analysis of market prices. Knowledge about the level and trends in prices in a demand and supply determined markets has paramount importance in explaining the behavior of an economy. The four important markets which require due attention are the: labor, capital, foreign exchange and commodity markets. The corresponding "prices" are: wages and salaries, interest rate, exchange rate, and prices of commodities.

When one refers to prices, two sets of information become evident. The first refers to nominal prices observed on a certain market at a specific time. These sets of data include: nominal wage, nominal interest rate, nominal exchange rate and prices of goods and services e.g. price of teff, bread, shoe, cement, etc. The second set of "price" information which has more economic meaning is real price. The most familiar real prices are: real wage rate, real interest rate, real effective exchange rate, real export and import unit values. In most countries, the construction of price indices is necessitated by the compilation of volume indices for a group of commodities.

Moreover, economic analysis could greatly be hindered without household income and expenditure data as it is extremely important in assessing the household economy - expenditure patterns and trends in income. One of the components of gross domestic saving - private household saving (unincorporated) - is determined through analyzing income and expenditure patterns of households at all levels. Household Budget Surveys are also very useful in establishing expenditure weights reflecting the relative importance of individual commodities in the consumer's basket in the construction of consumer price indices which are important indicators of changes in the general price level (inflation).

3.1 Review of Statistical Data Requirements

Data needed for the compilation of national accounts aggregates and periodic macroeconomic analysis are the basis for establishing the data requirement domain in this area. Transforming nominal values into real aggregates entails construction of appropriate indices to deflate the same so as to be able gauge the performance of expenditure components of GDP in real terms over time.

Producers' prices of commodities (goods and services) are crucial in evaluating the supply side of the economy which give rise to gross values of output for each item produced in the economy. Prices of inputs (goods and services) complement the process of estimation of GDP. These prices are called purchasers' prices (retail

prices). Apart from commodity prices, the availability of a timely flow of prices of factor inputs including land, capital, foreign exchange have paramount importance for economic analysis. Household Income, Consumption and Expenditure (HICE) survey provide the necessary demand side information needed to estimate GDP particularly of the private sector. Moreover, data from this survey is crucial for assessing poverty situation

The following price categories and their corresponding indices wherever applicable are considered essential in the process of producing national accounts aggregates and provisioning macroeconomic developments and evaluation of policy impacts.

- Producers' prices of goods and services in urban and rural areas;
- Retail prices of goods and services in market places;
- Export unit values for goods and services;
- Import unit values for goods and services;
- Freight tariff rate;
- Wage/salary rates for public and private employees;
- Interest rate by type of deposits and loans;
- Exchange rates;
- Land lease rate by region, rural, urban, purpose of use; and grade of land

With regard to Household Income Consumption and Expenditure, survey, results are expected to provide the following data items, among others:

- Household income by sources (rural versus urban);
- Household expenditure by type;
- Household receipts;
- Household transfers (inter - household);
- Household savings (saving status of households);
- Household per capita expenditure;
- Average household per capita expenditure on different items (food, clothing, etc. by rural versus urban);
- Household characteristics:
  - Household size
  - Age and sex composition
- Per capita daily food calorie intake (Rural, Urban, Regional and Country Level)

3.2 Assessment of the Existing Data

Commodity price statistics consists of both levels and indices constructed from them. Prices in terms of levels are the per unit values of commodities. These in broader categories include: producers' prices and retail prices. Producers' prices are supposed to be farm-gate or factory-gate prices which accrue to producers of goods and services. Those prices determine the behavior of individual producers in the economy. Retail/consumer prices are per unit values paid by final users of consumers of commodities. These include: trade and transport margins over and above producers' prices. Indices are indicators (in %) of trends in the general price levels of the respective groups: i.e. producers' and retail prices indices which are constructed using weights and individual prices of goods and services in each price group.

Producers' prices of agricultural commodities in rural areas are currently being made available through CSA's monthly surveys covering all regions of the country. However, these price levels have not been transformed into indices so that it is not possible to measure trends in terms-of-trade between the agricultural sector and the rest of the economy. This would help establish how much each farmer fares from his produce. The CSA's Annual Survey of Manufacturing and Electricity Industries provided producers; prices for major manufactured articles for the first time in the 1996/97 survey. Hence, there is a need for broadening the scope of coverage producers' prices of manufactured products for both private and public large and medium size manufacturing industries. The same applies to small scale, cottage and handicraft industry surveys which were conducted for the first time in 1995/96. As surveys on small scale manufacturing industries in urban areas and Handicraft/Cottage manufacturing in both rural and urban areas were conducted by the CSA for the first time for the 1995/96, producers' prices data on these categories of manufacturing are still lacking.

As to consumer prices' levels these data are being made available for both urban and rural areas through the CSA's monthly retail prices surveys. So far, Household Income, Consumption and Expenditure (HICE) surveys were conducted by the CSA. The 1963 survey for Addis Ababa until recently has been used as a source for expenditure weights in the construction of the Addis Ababa Consumer Price Index. Besides, the 1963 survey, the 1981/82 Rural Household Income, Consumption and Expenditure Surveys have been used in the computation of private final consumption expenditure component of GDP at current market prices. Although, urban survey was conducted in 1982/83 for selected urban areas, the results have not been put to use for a number of short comings encountered during the data collection process. The 1995/96 HICES, was more comprehensive than

the previous two surveys and has been provided the necessary demand side information needed to estimate GDP. Based on the 1995/96 HICES Consumer Price Indices at Country, Rural, Urban and Addis Ababa level has started since 1997 and published up to June 2001. Some adjustments has been done on the country level CPI to maintain consistency with a priori expectation about the relationship and difference among the rural, urban and country level CPIs. Hence, the country level CPI is correctly derived from its urban and rural components and revised back data are provided through July 1998. The availability of country CPI believed to fill the gap for country representative inflation indicator. Meanwhile, the 1999/2000 HICES, the recent and the most comprehensive one expected to rectify the shortcomings of the previously mentioned surveys. Based on the 1999/2000 HICES country and regional level CPIs has started since December 2000. The availability of regional level CPIs believed to fill the gap for regional level representative inflation indicators. Furthermore, the results generated from the 1999/2000 HICES could serve as a basic source of information for construction of regional level GDP.

Deflation of nominal private final consumption expenditure data has not been possible until recently due to lack of appropriate deflator at national level (like national CPI). Appropriate deflators for other components of GDP are also lacking. As the newly available series (1995/96 = 100) has not been linked to the old series (1963 = 100) some how; long-range trend analysis would be hindered in the subsequent years.

The other important set of prices refers to the factor market prices. That is: wage rate, interest rate, land rent/lease rate, exchange rate. Currently, nominal interest rate and exchange rate are made available by the NBE while no meaningful figure is available regarding wage and land rent. Moreover, the absence of indices on the above macro prices including Real Effective Exchange Rate Index, Real Interest Rate Index, Wage Index, Land Rent (Lease Rate) Index have constrained macroeconomic analysis. However, indices on Manufacturing Volume (Output) Index and Import and Export Unit Value Indices have been started which will be an input for various economic analysis in the country.

To sum up, prices are among the top priority information required for economic analysis. There are two sources of nominal or market prices: surveys and administrative records. Data generated through surveys are producer and retail prices of goods and services and household income, consumption and expenditure results. On the other hand, land rent; wage rate (partially), interest rate and exchange rate are generated from administrative records. For a smooth and sustainable flow of the requisite data on a regular and timely basis the pertinent institutions should put in place the necessary statistical mechanisms and enhance

capacity to prepare a springboard for full-scale dissemination of the required statistical data.

With respect to price indices, however, institutions should be charged with the responsibility of compiling the statistics and made them available on time. This in turn, calls for establishing and strengthening the statistical infrastructure, developing methodology and enhance capacity of focal institutions so that the necessary indices shall be made available as required.

The CSA should be in the forefront for the compilation and coordination of this task at national level. The focal institutions in this regard, among others, are the CSA, the NBE and the Federal Civil Service Commission.

3.3 Identification of Statistical Data

The above discussions have helped identify the prevailing data gap on the prices and household budget statistics. Following the gap matrix, a medium-term program of price and household budget statistics as well as indices have been outlined to meet users demand.

Note:-With the assistance of an IMF technical mission, the CSA had conducted a study on the feasibility of compiling the country level CPI based on price data from a reduced samples of 108-170 relatively large markets representing the eleven regions of the country (the original sample included 446 rural markets of which 340 were very small rural markets). Test calculations for these samples for the period April-September 2000 showed minor differences in month-to-month changes for the country level CPI and its major expenditure groups compared to those of the current CPI (i.e, using the 446 rural market places). Thus, the CSA found the introduction of a reduced sample justified, particularly as it will result in reduced costs, shorter delays in publication and improved accuracy, as less data need to be checked and processed each month. Accordingly, in order to satisfy user's demand for regional indices, the CSA decided that the current CPI components of rural and urban indices be replaced by a breakdown of the country level CPI on eleven regional indices. For this purpose, 119 samples of markets in 105 urban centers were selected on the basis of their importance, representative's, sensitivity to price changes and continuity.

This change implies, however, that the compilation of separate indices for the urban and rural sectors will be discontinued. The introduction of this new sample is necessary in order to bring the compilation of CPI up to international standards both with respect to coverage, accuracy and prompt publication. On the other hand, the survey of the producers' price of agricultural commodities has being conducted in the rural areas of the country; as usual.

3.4: Statistical Data Gap Matrix - Prices, Indices and Household Budget Statistics

No.	Indicator/Data	Statistical Gap	Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag	Focal Institution	Remark
1	**Price Levels**							
1.1	Producers' prices of agricultural goods and services (rural)	Available	– Private Peasant holding	– National – Regional – Zone	Monthly	2 months	CSA	Minor crops and agricultural tools and implements are not included
1.2	Producers' prices of manufactured products (urban + rural)	Not available for Small Scale and Handicraft/ Cottage	By producer type – public – private	– National – Regional	Quarterly	6 months	CSA	
1.3	Retail/consumer prices of goods and services (urban + rural)	Available	By type of commodity and annual weighted average	– National – Regional – Selected urban centers	Monthly	2 months	CSA	
1.4	Export unit values	Available	ISIC Group (Detailed)	– National	Bi-annual	3 months	CSA	
1.5	Import unit values	Available	ISIC Group (Detailed)	– National	Bi-annual	3 months	CSA	
1.6	Export prices	Not available	By commodity	– National	Annual	6 months	NBE/ CSA Customs	No reporting mechanisms
1.7	Import prices	Not as required	By commodity	– National	Annual	6 months	NBE/ CSA Customs	No reporting mechanisms
1.8	Freight rate/tariff rate	Not as required	– Freight – Passenger	Nation/Regional National/Region	- Quarterly - Quarterly	– 2 months – 2 months	RTA/CSA	

3.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag	Focal Institution	Remark
1.9	Capital goods prices	Not available	By type of goods	– National – Regional	Quarterly	6 months	Enterprises	
1.10	Prices of inventory	Not available	By inventory	– National – Regional	Annual	6 months	Enterprises	
1.11	Prices of selected construction materials	Incomplete	By type	– National – Regional	Annual	6 months	MOWUD/ CSA	
1.12	Wage rates by skill level (private versus public)	Incomplete	– Private – Public	– National – Regional	Annual	6 months	PSC/MOFED / CSA	
1.13	Interest rates (deposits versus loans)	Available but not as required	– Private banks – Government banks	National	Daily	1 day	NBE	No reporting mechanisms
1.14	Exchange rate (official Vs parallel)	Available but not as required	– Marginal – Parallel	National	Daily	1 day	NBE	No reporting mechanisms for parallel rates
2	**Price Indices**							
2.1	Producers price index of agricultural commodities	Not available	– Private peasant holdings – Commercial/ stock farms	– National – Regional	Quarterly	6 months	CSA	
2.2	Producers' price index of manufacturing products	Not available	– Private – Public	– National – Regional	Quarterly	3 months	CSA	
2.3	Consumer price index	Available	– National – Regional	– National – Regional	Monthly	1 months	CSA	

3.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag	Focal Institution	Remark
2.4	Export unit value index	Not available	– Primary products – Manufacture products	National	Monthly	3 months	CSA	
2.5	Import unit value index	Not available	– Capital goods – Consumers goods – Fuel	National	Monthly	3 months	CSA	
2.6	Export price index	Not available	– Primary products – Manufactured products	National	Monthly	3 months	NBE/CSA	
2.7	Import price index	Not available	– Capital – Consumers	National	Monthly	3 months	NBE/CSA	
2.8	Construction materials price index	Not available	By major groups	National	Monthly	3 months	MOI/ CSA	
2.9	Wage rate index	Not available	– Private – Public	– National – Regional	Monthly	3 months	PSC/ MOFED/ CSA	
2.10	Price index of Government purchased items	Not available	– Materials and services (current) – Capital goods	– National – Regional	Monthly	3 months	MOFED/ CSA	
2.11	Real interest rate index	Not available	Length time sector deposit and lending	National	Monthly	1 month	NBE/CSA	
2.12	Real effective exchange rate index	Not available		National	Monthly	1 month	NBE/CSA	
2.13	Land rent (lease rate) index	Not available		Regional Rural/urban	Monthly	1 month	IOE/CSA	
2.14	Freight tariff rate index	Not available	Major routes	Nation	Monthly	3 month	RTA/CSA	

3.5: Medium Term Program Matrix - Prices, Indices and Household Budget Statistics

No.	Statistical Program	Problem of the Data	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institutions	Remark
1	**Price Levels**								
1.1	Survey of producers' prices of agricultural commodities	Not comprehensive	Not previously requested	Secure a comprehensive data on all agricultural goods and services required for constructing producer price index and closely monitor development in agriculture	Extend the coverage of the existing survey	Comprehensive data on Agricultural producers prices (Monthly, with no more than two months lag)	Devise methodology to extend coverage	CSA	
1.2	Survey of producers' prices of manufactured products (selected)	Not comprehensive available for only 1996/97 for major manufactured articles	Not given due attention	Secure the basic data on manufacturing output required for constructing producer price index and closely monitor development in the sector	Design and introduce the survey and ensure its sustainability	Comprehensive data on prices of manufactured products (quarterly, with no more than one quarter lag)	Select a basket of commodities for which price shall be collected, design and introduce a sustainable system of conducting the survey	CSA	Should include consumption and capital goods

3.5: (Cont'd)

No.	Statistical Program	Problem of the Data	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institutions	Remark
1.3	Survey of retail prices of goods and services in selected market places	Available		A reliable data on retail prices through out the year required to construct indices and closely monitor trading margins and consumer welfare	Avoid multiple sources for one data set. Improve the present data collection, processing and reporting system of the CSA	Comprehensive and timely data on retail prices (monthly, with no more than two months lag)	Form a committee of major users and producers and work towards improving the survey conducted by the CSA so that duplication of data collection can be avoided	CSA	Should include consumption and capital goods
1.4	Compilation of commercial freight transport tariff rates	Not comprehensive and continuous	Lack of awareness on the part of producers of data on the extent to which the data are put to use	Comprehensive and timely data on tariff rate for close monitoring of the efficiency of the road transport sector	Create awareness for the need for a comprehensive data on tariff rate	Monthly data on freight tariff	Create awareness among produces of data for smooth flow of the require data	CSA/RTA	The data should cover major routes

3.5: (Cont'd)

No.	Statistical Program	Problem of the Data	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institutions	Remark
1.5	Compilation of data on land leasing rates	Not compiled and disseminated to users	Lack of awareness	Comprehensive and timely data on land lease rate required to establish baseline data on costs of investment	Assign the task of compilation to Federal institutions and introduce a sustainable system of data compilation and flow mechanisms	Monthly data on lease rate	Create awareness among data generators for a smooth flow of data to pertinent users	Urban Municipalities/ CSA	The data should show regional, urban-rural differential on lease rates (if any)
2	**Indices**								
2.1	Construction of producers' price index for agricultural commodities	Not available	Newly proposed index	Improve the analysis of the sector and construct sectoral TOT index	Enhance Technical capacity	Producers' price indices for all sub-sectors of agriculture (quarterly)	– Conduct a study towards construction of the index and wider take the programme	CSA	The category should include consumption and industrial inputs
2.2	Construction of producers' price index for manufactured products	Not available	Newly proposed index	Improve the analysis of the sector and construct TOT index	Enhance technical capacity	Producers' price indices for sub-sectors of manufacture (quarterly)	– Conduct a study towards construction of the index and undertake the program	CSA	The category should include construction materials, industrial inputs and machinery

3.5: (Cont'd)

No.	Statistical Program	Problem of the Data	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institutions	Remark
2.3	Construction of export unit value/price index	Not available	Newly proposed index	Improve macroeconomic management.	Develop a methodology and build sustainable capacity	Export unit value/price index (monthly)	– Conduct a study for construction of the index and undertake the program	CSA	Should be by type of commodity
2.4	Construction of import unit value/price index	Not available	Newly proposed index	Improve macroeconomic management	Develop a methodology and build sustainable capacity	Import unit value/price index (monthly)	– Conduct a study for construction of the index and undertake the program.	CSA	Should be by end use
2.5	Construction of commercial freight transport tariff index	Not available	Newly proposed index	Improve macroeconomic management	Develop a methodology and build sustainable capacity	Road freight rate index (monthly)	– Conduct a study for construction of the index and undertake the program	RTA/CSA	
2.6	Construction of wage index	Not available	Newly proposed index	Improve macroeconomic management	Develop a methodology and build sustainable capacity	Wage index (quarterly)	– Conduct a study for construction of the index and undertake the program	MOLSA/ CSA/	

3.5: (Cont'd)

No.	Statistical Program	Problem of the Data	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institutions	Remark
2.7	Construction of land lease rate index	Not available	Newly proposed index	Improve macroeconomic management	Develop a methodology and build sustainable capacity	Land leas rate index (monthly)	– Conduct a study for construction of the index and undertake the program	IOE/CSA	
2.8	Construction of real interest rate index	Not available	Newly proposed index	Improve macroeconomic management	Develop a methodology and build sustainable capacity	Real interest rate index (monthly)	– Conduct a study for construction of the index and undertake the program.	NBE/CSA	
2.9	Construction of real exchange rate index	Not available	Newly proposed index	Improve macroeconomic management	Develop a methodology and build sustainable capacity	Real exchange rate index (monthly)	– Conduct a study for construction of the index and undertake the program.	NBE/CSA	
2.10	Construction of Regional Consumer Price Index	Available	Constructed	Improve macroeconomic management		Regional consumer price index (monthly)		CSA	

3.5: (Cont'd)

No.	Statistical Program	Problem of the Data	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institutions	Remark
2.11	Construction of Consumer Price Index for National	Available	Constructed	Improve macroeconomic management		Consumer price index (monthly)		CSA	
3	**Household Budget Statistics**								
3.1	Household Income, consumption Expenditure survey	Regularize in a more comprehensive way	Conducted twice	Improve baseline data on household income and expenditure patterns	Develop improved methods	Comprehensive data on household income and expenditure patterns	Build up on the experiences of the previous surveys in order to improve subsequent household budget data	CSA	

4. AGRICULTURE SECTOR STATISTICS

Agriculture is the leading sector in the Ethiopian economy. It accounts for about 50 percent of GDP, employs about 80 percent of the labor force, generates about 85 percent of commodity export earnings, in which coffee alone accounts for about 60 percent, and provides raw materials for about 70 percent of the country's large and medium sized industries.

Crop production is estimated to contribute around 60 percent, livestock around 30 percent, and forestry and other sub-sectors around 10 percent of the total sectoral output.

Over nine million small holders, cultivating about eight to nine million hectares of land, follow a traditional, low input-low output rain fed farming technology and account for about 96 percent of agricultural output, including 98 percent of the coffee. The balance is produced by State Farms and by other public/private agricultural enterprises. Depending on the crop situation, only about 20 percent of the cereal production comes to the local market.

In order to have a better understanding of the sector's contribution and performance and initiate policy proposals, it is necessary to obtain a comprehensive, timely and standardized information on the agricultural sector in general and in crop and livestock sub-sectors in particular.

4.1 Review of Statistical Data Requirements

The process of agricultural planning, strategy designing, policy formulation and analysis, capital budget preparation, project implementation, appraisal, monitoring and evaluation, require a large volume of statistical data/information.

The data requirements of agricultural development planners and policy makers ranges from agricultural resource base which includes human resource (rural population), land, water, forest, wild life, livestock, poultry, beehives and fisheries to agricultural services, production and marketing which include the small-holder, pastoral- nomadic and commercial farming systems.

Data on rural population need to be disaggregated into agricultural and non agricultural population, pastorelist, agricultural labor force, economically active and inactive, population growth rates and migration (rural - rural and rural-urban). Such data should be available at National, Regional, Zonal and Woreda levels every ten years with a tolerable lag of one year. Regarding Land Resource and Use data on total geographic area; Land holding; and area under different uses are required. Utilized arable land classification can be made by area under temporary and

permanent/perennial crops and system of agriculture (rain fed and irrigation), which can further be dis-aggregated by crop type grown. Land holding should indicate private peasant holdings, state farm holdings, private commercial farm holdings, Joint Ventures (state and private) and others. Land use data are required by agricultural households, holder or establishment at National, Regional, zonal and woreda levels annually with a tolerable lag of one month for the private peasant holdings. Farm land of the private peasant holding should also indicate the breakdown for areas covered by the new and regular agricultural extension program. On the other hand a more comprehensive land use survey which would cover all holdings (private peasants, state farms, private commercial farms and others) need be conducted every five years and data should be available with a tolerable lag of one year. As regards to total geographic area data are required for the country, regions, zones and woredas. The focal institution for such types of data could be the Ethiopian Mapping Authority (EMA).

A series of data is also required in the areas of agricultural research, extension, rural credit and agricultural marketing.

Additional data required for medium and long-term demand projections for agricultural production, exports and debt servicing requirements of the country include population projections for both urban and rural population, urbanization projections, income and price elasticities of demand, nutritional requirements projection converted into aggregate commodity volumes, projection of world/regional demand, supply and trade in agricultural products, and national commodity situation and potential. Most of these statistics are derived based on historical data, and have paramount importance to establish sound projections of the country's future economic situation.

4.1.1 Crop Sub-Sector

For the purpose of this report data on this sub-sector could be classified in the following major categories (data classes). These are: Land Resource and Use, Early forecast of crop statistics, Crop Statistics, Agricultural Inputs and Practices (Farm Management Practices), Agricultural Machinery and Equipment, Cost of production of crops, Pre and Post harvest food grain losses, Farm Buildings, Farm level consumption and Marketing of agricultural products and by-products, Peasant Institutions, Technical coefficients and Conversion of Local area and production units into their Metric equivalents.

In order to device proper methods of land use planning and management so as to improve the productive capacity of the natural resource base detailed data on land resource and use are required. These data should include land under different uses,

such as crop land, fallow land, grazing land, wood land (timber) and others (parks, houses, gardens, water bodies, etc.).

To assess the country's food situation, possible intervention and emergency preparedness, the agricultural sector requires early forecast of crop statistics which should indicate area, production and yield of all types of meher season temporary crops (all holdings), weather conditions (rainfall, hail, frost, snow and others), agricultural input supply, pest outbreaks, wild and domestic animal damages, availability of farm oxen and implements. Such data are required by crop type, input types and type of pest; quantity of production and number of oxen at National and Regional levels. The data should be produced annually with a tolerable lag of one month after the data collection operation. The sources could be Central Statistical Authority (CSA), National Meteorological Services Authority (NMSA), Regional Agricultural Development Bureaus (RADBs), Ministry of Agriculture (MoA), National Fertilizer Industry Agency (NFIA) and National Seed Industry Agency (NSIA). Early forecast of crop statistics need be continued as it helps for the assessment of food supply, import requirements and food aid needs and the publication has to be released in the first week of November.

One of the major data/information sets required by the sub-sector is crop statistics. Crop statistics involves area, production and yield of all crop types (temporary and permanent) for all holdings. For holdings of the private peasant sector, data on production and yield of temporary crops are required to be shown separately. For the areas covered by the new and regular agricultural extension program. Temporary crops statistics including vegetables (potato, tomato, etc.), spices and others should be collected and compiled annually with a tolerable lag of three months by crop type, producer type, season (meher and belg) and system of agriculture (rainfed and irrigated) at National, Regional, Zonal, Woreda and Commercial Farm (state and private) levels. CSA is the focal institution for the supply of these data.

For permanent crops such as coffee, fruit crops (orange, banana, papaya, etc.); Root crops (Enset, sweet potato, etc.) and others the data should be made available by crop type, producer type, system of agriculture (rainfed and irrigated). The reporting level need be National, Regional, Zonal, Woreda and Commercial Farm (state and private). CSA is expected to produce these data annually with a tolerable lag of three months. Data on the quantity of crop by-products/residues and their uses should be available by crop type and producer type at National, Regional, Zonal and Woreda levels. These data need be collected by CSA every three years with a tolerable lag of three months. Information on the number of farmers practicing crop and mixed farming; number of farmers (crop growers) practicing irrigation and total irrigated area should also be included in this category (data

class) and be produced by CSA annually with a tolerable lag of three months. The information should be disaggregated by producer type (peasant farmers, private commercial farmers and state farms) and be reported at National, Regional, Zonal, Woreda and Commercial Farm levels.

The data on the above mentioned two major categories (early forecast of crop statistics and crop statistics) could largely be obtained from agricultural sample surveys (crop production forecast only for main season and crop production surveys for both main and belg seasons), land utilization survey, survey of state and private commercial farms and national agricultural census.

Agricultural value added estimation is an essential exercise to obtain the agriculture sectors contribution to the country's GDP. For this and other purposes we need to have data/information on inputs such as chemical and organic fertilizers, improved seeds, herbicides, pesticides, etc. and also information on the number of farmers using chemical and organic fertilizers, improved seed, herbicides and pesticides; area sown and harvested with fertilizer, production and yield; area sown and harvested with fertilizer and improved seed, production and yield; seeding rates (traditional and recommended), rate of chemical application and average household consumption; cost of labor, oxen, other means of traction and capital inputs incurred in the production process are very essential. All these data are required disaggregated by input type, quantity (imported, distributed and used), crop type, producer type, season, number of oxen and cost at national, regional, zonal, woreda and commercial farm levels annually with tolerable lag of three months. The data on agricultural inputs could be obtained from surveys of agricultural inputs and practices and administrative records. The main institutional sources could be CSA (for primary data); the NFIA and the NSIA (for secondary data).

Increased food production under the new extension package program may cause strain on existing methods of handling, storing and processing of crops, with the result of increased food grain losses. In order to create a full awareness and appreciation of the magnitude of losses and to plan investments in appropriate post-harvest technologies for the prevention of such losses, we require data on the types of loss such as drought, plant disease, insects, pests (migratory and non-migratory), rodents, wild and domestic animals and others; quantity loss at different stages such as pre-harvest, harvesting, threshing, drying, transporting, storage, processing, preservation and others. These data are required disaggregated by crop type, producer type, quantity in quintals at National, Regional, Zonal, Woreda and Commercial Farm levels. Such data could be obtained from surveys of pre-and post harvest grain losses which would be carried out by CSA every five years. The release of the survey report is expected with a tolerable lag of one year. The data on pre-and post harvest losses are also important to calculate the amount of crop output that would be available for consumption, seed for next production and

marketable surplus and be able to forecast the likely food grain deficit or supplies in line with the government long-term strategy of achieving food security and sustainable development in the country and make future forecasts.

Data/information on cost of crop production is also needed as it helps compare production unit costs with selling or market prices so as to be able establish profit margins for the farmers. Crop production cost components include land tax, depreciation on farm machinery and implements, grain and input storage, material inputs (seed, fertilizers, herbicides, pesticides, etc.), oxen (for planning and other tasks), labor, transport to local market and others. These data are required disaggregated by crop type, producer type, per hectare and per quintal at National, Regional, Zonal, Woreda and Commercial Farm levels. Such data could be obtained from surveys of cost of crop production to be carried out by CSA every three years and the survey report is expected with a tolerable lag of three months.

Agricultural Machinery and Equipment data such as tractors, combine harvesters; improved farm implements (mould board ploughs, harrows, planters, etc.); transport equipment (ox carts, wheel-barrow, etc.) are required disaggregated by type, number, status (working and not working) and ownership at National, Regional, Zonal, Woreda and Enterprise levels. These data are important to estimate the capital input of the sub-sector and production functions. The statistics could be obtained from administrative records and from agricultural machinery and equipment survey and national agricultural census to be carried out by CSA every ten years. The Survey and Census reports would be expected with a tolerable lag of one year.

Farm buildings data such as offices and houses of development agents, grain and input stores, plant health clinics, plant and soil laboratories, state and private commercial farm establishments are also required by type, number, status and ownership every ten years both at National, Regional, Zonal and Woreda levels. These data are also important to estimate the capital input of the sub-sector and production functions. Such statistics could be obtained from administrative records of RADBs and from the CSA survey of farm buildings and national agricultural census.

Data on farm level consumption and marketing of agricultural products and by-products such as quantity for own consumption (seed, food, feed and others); quantity of marketable production and by-product and sales prices (farm gate and market) are required disaggregated by product type, quantity, purpose, producer type and price per quintal at National, Regional, Zonal and Woreda levels.

Peasant institutions are expected to undertake a broad range of business and development activities such as agricultural output marketing, distribution of

consumer goods and agricultural inputs and provision of credit to their member farmers, construction of schools, clinics, roads and other infrastructures which would have significant contributions to the well being of the rural people and to the national economy as well. To initiate ways and means of strengthening to enable them further expand the size and diversity of their business and development activities and also to assess their impact on future rural development, we require data/information on their profile every three years at National, Regional, Zonal and Woreda levels.

These data should include the types (PAs, SCs and others); the number of PAs and their members disaggregated by female and male; the number of SCs, their Peasant Associations (PA) members, individual members (female and male); registered Service Cooperatives (SCs), their members (female and male), amount of capital, amount of debt, number of debited members, number of employees (permanent and contract); the status of Cooperatives or Associations (merged, splited, dissolved); number of SCs audited, number of SCs with default, the amount of money defaulted and collected, type and number of their establishments (offices, stores, schools, clinics, flour mills, small scale cottage industries and others); other assets such as generators, fishing nets, boats, weighing scale, etc.; marketing activities such as commodities marketed through the cooperatives in terms of quantity bought and sold for grain, coffee, shop commodity, agricultural inputs (chemical fertilizer, improved seeds, herbicides, pesticides, etc.); credit collected from bank, repaid to bank, delivered to members, repaid by members; trainings such as leadership training, training on cooperative accounting, number of cooperative members and staff trained. Such data could be obtained from surveys of profile of peasant institutions and national agricultural census to be carried out by CSA and also from administrative records of MOA and RADBs.

Once the necessary data on the crop sub-sector are obtained, it would be easier to derive technical coefficients, which are of paramount importance in establishing physical production and inputs in agriculture. These include rate of expansion of crop lands; seeding rates of temporary crops (traditional and recommended) by crop type and per hectare; number of seedlings planted per hectare (for permanent crops); yield per hectare for each type of crop; organic and inorganic fertilizer application rates by crop type per hectare (traditional and recommended); herbicides and pesticides application rates per hectare by crop type, etc.

Annual capital budget allocated to and utilized by the sub-sector and domestic and foreign investment in the sub-sector by source of finance are vital for planning and policy formulation of the sub-sector. Information on amount of domestic credit received and paid back by farmers during a year are required for optimum allocation of the country's domestic credit. Stock of crop products and inputs at the beginning and end of a year by type of product and input are essential statistics to analyze the

country's food and input situation, take appropriate measures of intervention and emergency preparedness. Information on domestic and world prices of agricultural commodities; quantity and value of exported (by destination) and imported (by origin) agricultural commodities by type are also required for planning, policy formulation and analysis. These data are also helpful to analyze and formulate sectoral and macro-economic policies such as exchange rate, formulation of export promotion policies and analysis of government tax revenue.

In conventional agricultural sample surveys, estimates of area under crop is obtained by measuring all the fields of the sampled households, and production estimates are also obtained by conducting crop cutting experiment on all fields under crop by crop type sampled (for the experiment). However, these techniques are laborious, tiresome, and time taking and above all they are costly. Due to these short comings, it would be necessary to develop metric equivalent factors for local area and production measurement units used by farmers. Once such a strong conversion factors are developed it is possible to conduct agricultural survey using only subjective method of data collection. Moreover, it reduces survey costs, saves time both for data collection, processing and report preparation.

4.1.2 Livestock Sub-Sector

The other major sets of data required by the agriculture sector are the livestock, poultry, beehives and fisheries statistics both in the highlands, low lands and nomadic areas.

A reasonably accurate estimate of the size of the livestock and fisheries resource of the country is important, as any assessment of the performance of the sector and calculation of available production and marketable surplus depend on it. The availability of robust information therefore is a prerequisite for effective planning of live-stock population dynamics, and conservation of biological diversity for efficient resource management, proper utilization and implementation of programs geared to improving production efficiency.

The required data on livestock, poultry, beehives and fisheries include the number of livestock by purpose; number of exotic and cross-breed animals; quantity of livestock products and by-products; fishery resource by water bodies, number of fishermen, quantity of fish products; poultry population and production; beehives population, production of honey and honey by-products; area of grazing land, carrying capacity and improved forage production; amount and cost of livestock, poultry, fisheries and bee keeping, development inputs (veterinary, breeding, production, marketing and training). These data are needed by type, purpose, number, sex, age category, ownership, quantity, name of water body, hectare of

grazing land, production values and cost of inputs. Data should be collected annually at National, Regional, Zonal and Woreda levels.

Animal health/veterinary services and amount and cost of inputs such as vaccines, animal and poultry feed, cost of capital and labor inputs are very essential for the determination of the sub-sector's value added.

Farm level consumption and marketing data of livestock and fisheries products and by-products by type, quantity and value are also required annually at National, Regional, Zonal and Woreda levels.

Another type of data required by the sub-sector is the farm buildings. Data on farm buildings such as livestock clinics, laboratories, crashes, ranches, hides and skin sheds, abattoirs and others are required by type, number, status and ownership at National, Regional, Zonal, Woreda and Enterprise levels. These data should be collected by CSA every ten years with a tolerable lag of one year.

Technical coefficients, which could be derived from the available data, are also very important in the livestock sub-sector. Such data include: livestock off-take rate; fertility or birth rates of cattle (local, pure exotics, cross breeds), sheep, goats, camels and equines; mortality rates of cattle (local, pure exotics, cross breeds), sheep, goats, camels, equines and hens (local, exotics); milk yield per head per lactation (pure exotics, local and cross bred cows), sheep, goats, camels carcass weight, dressing percentage; egg production per laying hen per year; amount of honey produced per bee hive (traditional and improved); amount of wax produced per kg of honey and others.

All the above sets of data in the livestock sub-sector are needed for planning, policy formulation, analysis and taking appropriate measures of intervention. These data could largely be obtained from livestock, poultry and beehives surveys; fishery statistics survey and compilation; survey of farm buildings; Surveys of State and private commercial farms and National Agricultural Census to be carried out by CSA and from the administrative records of relevant institutions. All the statistical programs required to fulfill the statistical data need of the agricultural sector are indicated in the Medium Term Program Matrix.

4.2 Assessment of the Existing Statistical Data

Efforts were made by CSA and MOA to satisfy the agricultural statistics data requirements and narrow the gap. Five nation-wide agricultural production and forecasting surveys and related studies were carried out by MOA during the 1974 - 80. Similarly CSA has made several efforts in producing agricultural statistics

through "Integrated System of Food and Agricultural Statistics" project and carried out over 20 annual agricultural sample surveys since 1980 except in the year 1992 and 1993 because of the full engagement of the Authority in undertaking the preparatory activities and the actual operation of the 1994 population and Housing Census. However, the Authority again resumed conducting annual agricultural sample surveys in 1995. It should be noted that CSA has made a break through in 2001/02 by conducting the first ever Agricultural Census of Ethiopia.

Currently, agricultural information is made available by a number of data generating organizations. Among these producers of agricultural data, CSA is the major primary data source. Other institutions such as MOA, Disaster Prevention and Preparedness Commission (DPPC), Institute of Agricultural Research (IAR), NMSA, Coffee and Tea Authority (CTA), NFIA, NSIA, etc. are the main secondary data sources. One thing that can be noted with regard to information on agriculture is that it is not available in a systematic manner covering all aspects by coordinating all data producers.

4.2.1 Crop Sub-Sector

Regarding crop statistics, the current agricultural sample surveys conducted by CSA include:

- Crop forecasting,
- Area and production for major crops, Meher and Belg seasons
- Farm management practices, and
- Land utilization.

Data available from crop forecasting publications include: area, production and yield of major temporary crops for private peasant holdings (Meher season); weather conditions (rainfall, hail and frost); availability of agricultural inputs (improved seeds, chemical fertilizers, pesticides and others); pest outbreaks (insects, locust, plant diseases and others/birds); wild and domestic animal damages.

The survey reports on area and production of major crops provide data on area, production and yield of major temporary crops for private peasant holdings (both seasons) for the country as a whole and by regions and zones.

Types of available data from the publications on farm management practices include: area under the use of agricultural inputs such as fertilizers, improved seeds, pesticides, herbicides; area under irrigation; amount and cost of agricultural in puts by type; and number of farmers who use farm management practices. These data are available annually for the private peasant holdings (both seasons).

Data on area under different land uses (for private peasant holdings, meher season) such as crop land, fallow land, grazing land, wood land and other land uses (houses, parks gardens, water bodies which are part of the holding); and size of holdings are available from the land utilization survey reports of the CSA.

4.2.2 Livestock Sub-Sector

The livestock data available are only estimates mainly taken from ad hoc surveys carried in the early 1960's by the then Livestock and Meat Board, the sample surveys conducted by MOA in 1985/86 for Pan African Rinder Pest Control Campaign and those of CSA which have been carried out since 1980/81 annually.

CSA's current livestock survey reports, covering only the private peasant holdings in the sedentary areas of the country, provide data on the number of livestock and poultry by type, purpose, sex and age category; number of beehives by type (modern and traditional); amount of honey production per year; and number of holders reporting livestock and poultry.

4.3 Identification of Statistical Data Gaps

Although significant improvements have been made in the availability of agricultural data, since the launching of Integrated System of Food and Agricultural Statistics Project by CSA in 1980, still much more needs to be done to fill the existing agricultural data gaps in the country. Some of the major data gaps in the crop and livestock sub-sectors are the followings.

4.3.1 Crop Sub-Sector

CSA's agricultural sample surveys are currently the major primary data sources concerning crop statistics in the country. However, these surveys have limited scope and coverage. According to CSA's report, since 1980/81, because of the limited human and financial resources, the Authority has been forced to limit the scope and coverage of the different annual agricultural sample surveys. Hence, it gave priority to the private peasant holdings and to the major 22 temporary food crops although it attempted to cover the state farms and cooperatives in the early 80's.

Data on the early forecast of crop statistics (main season) are also inadequate. The forecast doesn't include data on the area, production and yield of major temporary crops for state and private commercial farms; and data on the area, production and yield of vegetables such as cabbages, potato, tomato, carrot, etc.; root crops such as enset, sweet potato, etc.; spices; pepper; and others for all holdings (private

peasants, state farms, private commercial farms and others). Data on land resource and use such as the total geographic area for the country, regions, zones and woredas; land holdings of state farms and private commercial farms; land uses of state and private commercial farms are not covered by the survey. The partially available land use data also vary from one source to another. The main reason for the variation of land use data may be the absence of comprehensive national land use survey which covers all holdings.

Information on agricultural inputs such as fertilizers, improved seeds, herbicides, pesticides, etc., used in the production process of state farms and private commercial farms are not available from the survey reports on farm management practices of the CSA.

Data on pre and post harvest grain losses by type of loss (drought, plant disease, insects, pests, rodents, wild animals and others); quantity of loss at different stages (pre-harvest, harvesting, threshing, drying, transporting, storage and others); data on costs of production of crops; on peasant institutions (types, number, status, members, their activities, assets, staff, provision of training and credit facilities); data on farm buildings such as offices and houses of development agents, grain and input stores, plant health clinics, laboratories (plant and soil), state and private commercial farm establishments and others; machineries such as tractors, combine harvesters, etc.; improved farm implements such as mould board plough, harrows, planters, etc.,; transport equipment such as ox carts, wheel barrows, etc.; and data on farm level consumption and marketing of crop products and by-products such as quantity for farm level consumption (seed, food, feed and others), quantity of marketable product and by-product are not also available in an organized manner.
It is understandable that deficiencies in the above mentioned statistics have severe effect on planning, project designing, monitoring, policy formulation and analysis of the crop sub-sector.

4.3.2 Livestock Sub-Sector

In the area of livestock, poultry, beehives and fisheries statistics the situation is not any better. Data on livestock number in nomadic and urban areas; livestock diseases, veterinary services; fishery statistics; livestock, poultry and fishery products; farm level consumption and marketing of livestock, livestock products and by products; poultry; fishes; honey and wax; value of marketable products and by products including live animals are not available from CSA's current surveys.

According to CSA's report annual livestock surveys do not cover nomadic and urban areas mainly due to shortages of human and financial resources. In addition to this, the nomadic areas have very unique problems. Given the lack of appropriate data

collection methodology, population census and hence the Authority does limit the survey scope and coverage only to the rural sedentary areas.

Data on livestock clinics, laboratories, crashes, ranches, hides and skins sheds and abattoirs are partially available from administrative records of concerned agencies.

The available data from different sources regarding the sub-sector are also incomplete and hard to interpret; and have not helped establish the livestock resource base of the whole country as surveys were not covering all agro-ecological zones and taken at different times and intervals.

The absence of data on the impact of short term cyclic impacts of drought, disease, etc. that could always affect the livestock population dynamics and productivity parameters would make it difficult to determine the long term livestock population growth trend. The overall agricultural data/gap is indicated in the Statistical Data/ Gap Matrix followed by a medium-term program matrix.

4.4: Statistical Data Gap Matrix - Agricultural Sector

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
1	**Land Resource and Use**							
1.1	Total geographic area	Not updated		National, Regional, Zonal, Woreda			EMA	
1.2	Land holding and use: peasant holding only, agricultural land, wood land, area under meadows and pasture, arable land and all other land	Inadequate	Holder	National, Regional, Zonal, Woreda	Annually	1 month	CSA/ RADBs/ MOA	Survey
1.3	Land holding and use: all holdings, agricultural land, wood land, area under meadows and pasture, arable land and all other land	Inadequate	Holder/ Establishment	National, Regional, Zonal, Woreda	Every 5 years	1 year	CSA/MOA/ RADBs/ EMA	Survey
2	**Early Forecast of Crop Statistics (main season) and Livestock situation Assessment**							
2.1	Conditions of rainfall, in put supply, pest out breaks, Availability of farm oxen, Crop production estimate	Inadequate	Type of crop, input, pest	National, Regional	Annually	1 month	CSA/ NMSA/ RADBS/ MOA, NFIA, NSIA	Survey
2.2	Livestock situation, feed situation	Not available	Type of animal, disease, feed	National, Regional	Annually	1 month	CSA, MOA, DPPC, RADBs	

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
3	**Crop Statistics**							
3.1	Area, production and yield of all types of temporary crops including vegetables (potato, tomato etc.), species and others	Partially available	Crop type, producer type, season, system of agriculture (rainfed, irrigated) New & regular extension program	National, Regional, Zonal, Woreda and Commercial farm	Annually	3 months	CSA	– Reports are expected to be released: a) for main season crops in March b) for Belg season crops in October; survey
3.2	Area, production and yield of all types of perennial crops: Coffee, fruits crops (orange, banana, papaya etc.), enset, and others	Partially available	Crop type, producer type, system of agriculture (rain fed, irrigated)	National, Regional, Zonal, Woreda, commercial farm	Annually	3 months	CSA	Survey
3.3	Quantity of crop by-products or residues and their uses	Not available	Crop type, producer type	National, Regional, Zonal, Woreda	Every 3 years	6 months	CSA/MOA / RADBs/ EARO	Survey
3.4	Number of farmers practicing crop, livestock and mixed farming	Partially available	Producer type: peasant farmers, private commercial farmers	National, Regional, Zonal, Woreda	Annually	3 months	CSA/MOA / RADBs/ EARO	Survey
3.5	Number of farmers (crop growers) practicing irrigation	Partially available	– Peasant farmers – private commercial farmers	National, Regional, Zonal, Woreda	Annually	3 months	CSA/MOA / RADBs/ EARO	Survey

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
3.6	Total irrigated area	Partially available	Crop type, producer type	National, Regional, Zonal, Woreda	Annually	3 months	CSA	Survey
4	**Agricultural Inputs and Practices**							
4.1	Chemical and organic fertilizers, improved seeds, herbicides, pesticides, etc.	Partially available	Input type, amount (imported, distributed and used), crop type, producer type, season, new and regular extension program for peasant sector	National, Regional, Zonal, Woreda, commercial farm	Annually	3 months	CSA/ NFIA/ NSIA	Some secondary data could be obtained from National Fertilizer Industry Agency (NFIA) and from National Seed Industry Agency (NSIA). Survey/Administrative Record
4.2	Number of farmers using chemical fertilizer, improved seed, herbicides, and pesticides	Partially available	Type of input, Producer type: (peasant farmers, private commercial farmers), new and regular extension program for peasant sector	National, Regional, Zonal, Woreda, commercial farm	Annually	3 months	CSA	Survey
4.3	Area sown and harvested with fertilizer; production and yield	Partially available	Fertilizer type (organic, inorganic), crop type, producer type, season, new and regular extension program for peasant sector	National, Regional, Zonal, Woreda, commercial farm	Annually	3 months	CSA	Survey

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
4.4	Area sown and harvested with fertilizer and improved seed; production and yield	Partially available	Crop type, producer type, season, new and regular extension program for peasant sector	National, Regional, Zonal, Woreda, commercial farm	Annually	3 months	CSA	Survey
4.5	Seeding rates (traditional and recommended), rate of chemical application and average house hold consumption	Partially available	Crop type, chemical type, kg. per ha.	National, Regional, Zonal, Woreda	Annually	3 months	CSA	Survey
4.6	Labor, oxen, other means of traction and capital inputs	Not available	Type, number, quantity	National, Regional, Zonal, Woreda, commercial farm	Annually	3 months	CSA	Survey
4.7	Improved and traditional farming practices	Not available	Type of practice, number of farmers who apply the practice	National, Regional, Zonal, Woreda	Annually	3 months	CSA, MOA, EARO, RADBs	
5	**Agricultural Machinery and Equipment**							
5.1	Agricultural machineries such as tractors, combine harvesters, etc.	Not available	Type, number, status, ownership	National, Regional, Zonal, Woreda, Enterprise	Every 10 years	1 year	CSA	Survey/census
5.2	Improved farm implements such as mould board plough, harrow, planter, etc.	Not available	Type, number, status, ownership	National, Regional, Zonal, Woreda, Enterprise	Every 10 years	1 year	CSA	Survey/census
5.3	Transport equipment, such as ox carts, wheel-barrow, etc.	Not available	Type, number, status, ownership	National, Regional, Zonal, Woreda, Enterprise	Every 10 years	1 year	CSA	Survey/census

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
6	**Cost of Production**							
6.1	Crop Costs of labor, seed, fertilizer, implements, grain storage, transport cost, animal power, herbicides, pesticides, land tax and others	Not available	Crop type, producer type, per hectare and per quintal, animals product type	National, Regional, Zonal, Woreda, commercial farm	Every 3 years	6 months	CSA/MOA/ RADBs	Need be conducted as it helps for comparison with selling or market price. Survey
6.2	Livestock							
7	**Pre-and Post Harvest Food Grain Losses**							
7.1	Type of loss: drought, flood plant disease, insects, pests, rodents, wild animals and others	Not available	Crop type, producer type, quantity in quintals	National, Regional, Zonal, Woreda, commercial farm	Every 5 years	1 year	CSA/EARO	Should be undertaken as it helps to forecast food availability Survey
7.2	Quantity loss at different stages: pre-harvest, harvesting, threshing, drying, transporting, storage, and others	Not available	Crop type, producer type, quantity in quintals	National, Regional, Zonal, Woreda, commercial farm	Every 5 years	1 year	CSA/ EARO	Should be undertaken as it helps to forecast food availability and develop appropriate technology to minimize it Survey
8	**Livestock, Poultry, Bee Hives and Fisheries**							
8.1	Number of livestock by purpose	Partially available	Type, purpose, number ownership	National, Regional Zonal, Woreda	Annually	3 months	CSA/MOA	Data especially of range lands is not available due to limited coverage of surveys Survey/census

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
8.2	Number of exotic and cross bred animals	Partially available	Type, number, ownership	National, Regional, Zonal, Woreda	Annually	3 months	CSA/MOA	Their exact number and where about is not known. Survey/census
8.3	Quantity of production of livestock, livestock products and by-products	Not available	Product type ownership	National, Regional, Zonal, Woreda	Annually	3 months	CSA/MOA/ RADBs	Survey
8.4	Fishery resource by water bodies, number of fisher men, fish production	Partially available	Name of water body, quantity, number of fishermen, type of fish	National, Regional, Zonal, Woreda	Annually	3 months	CSA/MOA/ RADBs	Fishery resource potential of water bodies except few in land lakes is unknown. Survey/Administrative Records
8.5	Poultry population and production	Partially available	Number, quantity of produce, owner ship	National, Regional Zonal, Woreda	Annually	3 months	CSA/MOA	Survey
8.6	Bee-hives by type, production of honey and honey by-products	Partially available	Type, quantity	National, Regional, Zonal, Woreda	Annually	3 months	CSA/MOA	Survey
8.7	Area of grazing land, carrying capacity and improved forage production	Not available	Hectares, number of livestock	National, Regional Zonal, Woreda	Annually	3 months	CSA/MOA/ RADBs	No compreliensive data on grazing area, its distribution and carrying capacity is available. Survey
8.8	Amount and cost of Livestock, poultry, Fisheries and Bee Keeping development inputs (veterinary, breeding, production, marketing , feed, Training etc.)	Not available	Type of input quantity and cost	National, Regional, Zonal, Woreda	Annually	3 months	CSA/MOA/ RADBs	No data is available due to the absence of organized data base Survey

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
9	**Farm buildings and Establishments**							
9.1	**Crop Sub-Sector**							
9.1.1	Development Agents' offices and houses	Partially available	Type, number condition or status	National Regional, Zonal, Woreda	Every 10 years	1 year	CSA/ MOA/ RADBs	Survey/census
9.1.2	Grain and input stores cold rooms; community Gen Banks	Partially available	Type, number condition or status	National Regional, Zonal, Woreda	Every 10 years	1 year	CSA/ MOA/ RADBs	Survey/census
9.1.3	Plant Health Clinics and quarantine stations	Partially available	Number and status	National Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA /RADBs	Survey/census
9.1.4	Laboratories (plant and soil)	Partially available	Type, number status	National, Regional, Zonal	Every 10 years	1 year	CSA/MOA / NFIA/NSI A/RADBs	Survey/census
9.1.5	State and private commercial farm establishments	Not available	Type, number, status, ownership	National Regional, Zonal, Woreda	Every 10 years	1 year	CSA	Survey/census
9.2	**Livestock sub-sector**							
9.2.1	Livestock clinics, laboratories, crashes, ranches, hides and skin sheds, abattoirs, Artificial Insemination centers, feed mills, Bull centers, Breeding centers and others	Partially available	Type, number, status, ownership	National, Regional, Zonal, Woreda, Enterprise	Every 10 years	1 year	CSA/MOA	Especially recent data regarding developments in the Regions is unknown. Survey/census
9.2.2	State and private livestock farm establishments	Not available	Type, number, status, ownership	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA	Survey/Census

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
10	**Farm Level Consumption and Marketing of Agricultural Products and by-Products**							
10.1	**Crop**							
10.1.1	Quantity for own consumption (seed, food, feed and others)	Partially available	Type, quantity, purpose, producer type	National, Regional, Zonal, Woreda	Every 5 years	1 year	CSA	Survey
10.1.2	Quantity of marketable product and by-product	Partially available	Type, quantity, producer type	National, Regional, Zonal, Woreda	Every 5 years	1 year	CSA	Survey
10.1.3	Sales prices (farm gate and market)	Partially available	Type Birr/quintal	National, Regional, Zonal, Woreda	Every 5 years	1 year	CSA	Survey
10.2	**Livestock and Fisheries**							
10.2.1	Quantity of farm level consumption (livestock and livestock products and by-products, fish and honey)	Not available	Type amount, producer type	National, Regional, Zonal, Woreda	Every 5 years	1 year	CSA	Survey
10.2.2	Quantity of marketable livestock, livestock products and by-products, fish and honey	Not available	Type of animal, product or by-product, producer type	National, Regional, Zonal, Woreda	Every 5 years	1 year	CSA	Survey
10.2.3	Price of marketable products and by-products including live animals	Not available	Type of animal, product, by-product, producer type	National, Regional, Zonal, Woreda	Every 5 years	1 year	CSA	Survey

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
11 11.1	**Community Based Farmers' Organizations** **Types: Kebele Administration Service Cooperatives (SCs) and Others**							
	Number and their members (Female and Male)	Not available	Type, number, sex, year	National, Regional, Zonal, Woreda	Every 3 years	6 months	CSA/MOA/ RADBs	Survey/Administrative Records
11.2	Registered SCs, their members (Female and Male) amount of capital amount of debt, number of debted members, number of employees, permanent, contract	Not available	Type, number, sex, amount, year	National, Regional, Zonal, Woreda	Every 3 years	6 months	CSA/MOA/ RADBs	Survey/Administrative Records
11.3	**Status:** merged, splited, dissolved, number of SCs audited, number of cooperatives with defaults, amount of money defaulted	Not available	Type, number, amount, year	National, Regional, Zonal, Woreda	Every 3 years	6 months	CSA/MOA/ RADBs	Survey/Administrative Records
11.4	**Number of cooperative establishments:** office, stores, schools, clinics, flour mills, small scale cottage industries and others	Not available	Type, number, year	National, Regional, Zonal, Woreda	Every 3 years	6 months	CSA/MOA/ RADBs	Survey/Administrative Records

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
11.5	**Other assets:** generators, fishing nets, boats, weighing scale, etc.	Not available	Type, number, year	National, Regional, Zonal. Woreda	Every 3 years	6 months	CSA/MOA/ RADBs	Survey/Administrative Records
11.6	**Marketing activities**: commodities marketed through the cooperatives interms of quantity bought and sold for grain, coffee, shop commodity, agricultural inputs (chemical fertilizer, improved seeds, pesticides, herbicides, etc.)	Not available	Type, quantity, year	National, Regional, Zonal, Woreda	Every 3 years	6 months	CSA/MOA/ RADBs	Survey/Administrative Records
11.7	**Credit:** collected from bank, repaid to bank, delivered to members, repaid by members	Not available	Type, amount, year	National, Regional, Zonal, Woreda	Every 3 years	6 months	CSA/MOA/ RADBs	Survey/Administrative Records
11.8	**Training:** leadership training, training on cooperative accounting, number of cooperative members and staff trained	Not available	Type, number, year	National, Regional, Zonal, Woreda	Every 3 years	6 months	CSA/MOA/ RADBs	Survey/Administrative Records

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
12	**Technical Coefficients**							
12.1	**Crop Sub-Sector**							
12.1.1	Rate of expansion of crop land	Not available	Crop type, per cent	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ RADBs	
12.1.2	Seeding rates of temporary crops (traditional and recommended)	Partially available	Crop type amount/ha.	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ EARO	Only recommended rates are available
12.1.3	Number of seedlings planted per ha. for perennial crops	Not available	Crop type, number/ha.	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ CTA/ EARO	
12.1.4	Yield per ha for each type of crop	Partially available	Crop type amount/ha.	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA	Only for major annual crops is available
12.1.5	Application rate for chemical fertilizer, organic fertilizer and other chemicals	Partially available	Type of input, type of crop, amount of input per hectare	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/ EARO	Application rate for chemical fertilizers only is available
12.2	**Livestock sub-sector**							
12.2.1	Livestock off take rate	Needs up dating	Type, percent	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ EARO	Need be revised every time

4.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
12.2.2	Fertility or birth rates of cattle (local, pure exotics, cross breeds), sheep, goats, camels, equines under normal circumstances	Inadequate	Type of animal and breed, per cent	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ EARO	
12.2.3	Mortality rates of cattle (local, pure exotics, cross breads), sheep, goats, camels, equines and hens (local, exotics)	Inadequate	Type of animal and breed, per cent	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ EARO	
12.2.4	Milk yield per head per lactation (pure exotics, local and cross bred cows); sheep, goats, camels, lactation period	Partially available	Type of animal, and breed, quantity	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ EARO	
12.2.5	Carcass weight, dressing percentage, live weight	Not available	Type of animal, quantity, per cent	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ EARO	
12.2.6	Egg production per laying hen per year	Not available	Quantity, year	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ EARO	
12.2.7	Amount of honey produced per bee hive (traditional and improved)	Partially available	Quantity, type of beehive, year	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ IAR	
12.2.8	Amount of wax produced per kg. of honey (maximum)	Not available	Quantity, year	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA/MOA/ EARO	
12.2.9	Parturition period, weaning age	Not available	Type of animal and breed	National, Regional, Zonal, Woreda	Every 10 years	1 year	EARO, MOA, CSA	
13	Conversion of local measurement units into their metric equivalents	Note available	Area and product type	National, Regional	Every 10 years	6 months	CSA/ EARO, MOA	
14	Trained Agricultural Personnel	Inadequate	Number, profession type	National, Regional, Zonal, Woreda	Every 10 years	1 year	CSA, MOA, RADBs	

4.5: Medium Term Statistical Program Matrix - Agriculture Sector

No	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Crop Production Forecast and livestock situation assessment	Available data from different sources are not the same, and coverage problem	– Uncoordinated assessment among different organizations – Resource limitation	To improve the content, timelines, and reporting level of the CSA data so as to meet the data need of the Federal and Regional Governments and establish a system that could avoid duplication of effort.	– Enhance data collection capacity of the CSA. – Adopt a policy of one source for one type of data	– An annual crop forecast report would be available on first week of November, – Provide information on rainfall and pest conditions, availability of inputs & farm oxen and production estimate; livestock situation assessment report	– Close working environment b/n regions and the CSA, – Field assessment, – Data collection, – Processing and forecasting	CSA	Need to be continued as it helps for the assessment of food supply, import requirements and food aid needs. Survey
2	Crop Production Survey	Production of some temporary crops and all permanent crops are not considered	Resource limitation.	Collect basic quantitative data on the nation's agriculture	– Increase the coverage of the data collection – Improve CSA capacity	Basic data on area, production and yield of all types of crops (annually and on woreda level) Data for the private peasant sector need be disaggregated for the new and regular extension program	– Enhance CSA's capacity – Preparations of survey questionnaires, sample design, data collection, processing & dissemination	CSA	Survey results have to be published: a. for Meher crops in March and b. for Belg crops in October Survey

4.5: (Cont'd)

No	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
3	Land Utilization Survey for peasant holdings only	Data on land utilization for all types of crops are not indicated	Resource limitation	Conduct land utilization survey so as to understand the country's land utilization practices	Make the data collection exhaustive	Land utilization survey available annually reported at woreda level Separately shown for the new and regular extension program	Data collection, processing & dissemination capacity of the CSA enhanced and budget made available to conduct the survey	CSA	Survey
4	Agricultural Inputs & Practices Survey	Limited data coverage	There is no clear institutional arrangement for producing a comprehensive data report	Produce a comprehensive information on agricultural inputs and practices	Increase the coverage of data collection, establish a system of integrated survey result with administrative record	Detailed information on agricultural inputs disaggregated for the new and regular extension program	– Prepare questionnaire, conduct survey, – Regularize the flow of administrative records – Produce a comprehensive report.	CSA/ NFIA/ NSIA/ EARO	Survey/ Administrative Record
5	Livestock, Poultry and Beehives Survey	Limited coverage particularly animal products and by-products, veterinary services, labor & capital inputs; nomadic areas not covered	Capacity and resource limitations	Make available the required information for planning and policy formulation; research and education	Enhance capacity & increase the coverage of the data collection	Comprehensive data for the sub-sector planning & policy formulation (yearly, woreda level)	Mobilize resources, conduct survey both in the high- lands and nomadic areas of the country	CSA	Survey/census
6	Comprehensive land use survey for all holdings	Data on land use for state farms and private commercial farms are not indicated	Resource limitation	Conduct a comprehensive survey covering all holdings	Make the data collection exhaustive	Land use survey data available every 5 years reported at woreda level	Enhance the data collection capacity of the concerned institution and make available the necessary budget	CSA MOA, EMA, RADBs,	Survey

4.5: (Cont'd)

No	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
7	Cost of production survey	Not available	Valuation problem, lack of experience of the respondents	To fulfill data need required for analyzing the profitability of agricultural practice.	Conduct survey using refined methodologies	Up-to-date & reliable data on cost of production every 3 years, woreda level	Develop questionnaire, collect data, process & disseminate	CSA, MOA, EARO	The data is crucial for designing and evaluation of agricultural sector policies and programs Survey
8	Fishery Statistics Survey & Compilation	Not available	Not given due attention	To collect and compile the necessary information	Strengthen focal institution in designing, methodology and collection	Basic data on fishery statistics (annually, woreda level)	Design methodology enhance capacity; Collect, process and disseminate information	MOA/CSA,	Administrative Records/survey
9	Pre- and Post Harvest Grain Losses Survey	Inadequate and not ` up-to-date	Not given due attention	To plan investments in appropriate prevention technologies	Establish a system of data collection Enhance data collection capacity	Data on pre and post harvest loss (Every 5 years, worda level)	Questionnaire design, data collection, processing & dissemination	CSA/IAR/ MOA	It should be undertaken as it helps to forecast food availability and plan investment in appropriate prevention technologies Survey
10	Farm Buildings, establishments and Implements Survey	Inadequate	Capacity and resource limitations	To provide the necessary data for designing a strategy and programs that can ensure a sustainable productive capacity improvement	Allocate the necessary resource	A comprehensive data on farm infrastructure (every 10 years, woreda level)	Develop questionnaire, collect & disseminate data	CSA	Survey/census

4.5: (Cont'd)

No	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
11	Profile of community based farmers organization	Not available	Not given due attention	Make available the required information so as to enhance farmers access to inputs, tech., etc.	Provide the necessary support to focal institutions (every 3 years woreda level)	Basic data on the status of peasant institutions	Questionnaire designing, data collection & disseminate	CSA/MOA/ RADBs	Survey/Administrative Record
12	Survey of State, Private and institutional Commercial Farms	Currently not available	Capacity and resource limitation	Acquire a comprehensive data on agriculture and see trend in private sector participation	Increase the coverage of agricultural sector surreys by enhancing capacity	Basic data on state & private commercial farms	Develop questionnaire, collect and disseminate data	CSA/PESA	Survey/ Administrative Record
13	National Agricultural Census	Until 2001/02 it has never been undertaken. This in turn implies a serious information gap regarding the sectors' potential and the level and trend of efficiency in production, consumption, and distribution	High resource requirement	Broaden the data spectrum and upgrading the existing agricultural information	Provision of sufficient resources	Data related to the characteristics of the organizational structure of agriculture and the use of agricultural resources such as manpower, land & water, livestock, poultry & fishery, machinery, farm buildings and other fixed assets	Prepare questionnaire, undertake census, process data, evaluate/analyze census data	CSA	Census Conducted in 2001/02 and expected to narrow most of the existing data gap.

4.5: (Cont'd)

No	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
14	Conversion of local measurement units into their Metric equivalents	Not available	Capacity limitation and high resource requirement	To develop strong Metric equivalents conversion factors for local units	Enhance capacity, allocate the necessary resources	Metric equivalent conversions for each local area and product type	Prepare questionnaire, collect and disseminate data, undertake survey, produce comprehensive report	CSA	
15	Trained personnel in agricultural sector	Inadequate	Insufficient recording system	Improve the provision of agricultural services	Improve the recording system	Data on agricultural personnel	Prepare questionnaire, collect data	CSA, MOA, RADBs	Survey/ Administrative Record

5. ENVIRONMENT AND NATURAL RESOURCES SECTOR STATISTICS

Ethiopia is blessed with a rich and diverse natural resource base, reflecting variations in altitude, climate, soils and natural vegetation. Ethiopia's human population has lived in close association with these natural resources for thousands of years, depending upon fertile soils for agriculture and forest products for fuel and construction materials. The extent to which Ethiopia has been forested in recent times has become the subject of some debate, but it is clear that Ethiopia has long supported a distinctive agrarian society, with an important livestock component.

A significant factor with regard to the interaction of Ethiopia's population to the country's resource base lies in the rapid and continuing population increase. About 85% of the population is employed directly in agriculture. Agriculture is directly dependent on natural resources and fundamental natural processes and cycles that are increasingly becoming disrupted, with consequent effects of poverty, food insecurity and periodic famines and floods.

There are clear indications that this natural resource base is being depleted. Soil erosion, for example, has become severe in some areas of the highlands. It has been estimated that crop yields are declining by 1 - 3% annually, and that about 20,000 to 30,000 hectares of crop land in the highlands are abandoned each year because cropping can no longer be supported by the soils. Salinity is thought to affect about 25% of irrigated land in the Awash Valley.

However, these parameters are not founded and established on the basis of scientific surveys or censuses. Detailed information on the location and rates of soil erosion, soil depletion through loss of fertility and salinity and water logging are not currently available. The extent of soil conservation measures and their effectiveness needs to be quantified.

With this background the following section will provide some clue related to the sectors data situation.

5.1 Review of Statistical Data Requirements

Annual loss of natural forests is currently estimated at about 150,000 to 200,000 hectares per year. Many of these forests provide critical watershed protection and local climate change amelioration functions. Ethiopia's rich and unique biodiversity is increasingly threatened by habitat loss, including natural forests and hunting, and with it the potential to attract valuable foreign exchange through tourist revenues.

Plantations of exotic tree species, such as Eucalyptus cannot compensate for the loss of natural forests, and may have uncertain effects on agriculture (e.g. through soil water depletion).

As a result of increasing population and a shrinking natural resource base, we are now seeing an expansion of agriculture in to marginal lands that have traditionally supported forest and range land vegetation. Once this vegetation is removed, soil erosion and soil fertility declines rapidly exacerbating an already difficult situation. Lack of fuel wood means that animal dung is utilized as fuel in some areas, reducing potential organic input for soil enrichment.

Areas which need to be known in order to formulate a sound policy on how to use and develop forest, soil and wildlife resources include: area covered by forests and savanna wood land, amount of forest products such as timber, charcoal, fuel wood, products used for construction products for industrial use, gum and others; extent and rate of soil degradation (erosion, salinity, fertility decline); number of wild life species; and others. Moreover, data on environment specifically on solid waste management are required.

5.2 Assessment of the Existing Statistical Data

Generally, data sources on natural resources are disorganized and restricted to isolated areas of research and development projects. Soil surveys have not been sufficiently conducted. The Woody Biomass Project has collected, and continues to collect, invaluable information on forests, woodlands and trees, but full coverage of the country will take some time. Wildlife surveys are mostly confined to a few protected areas, but some endemic species are found only outside of these areas.

Natural resources are the sine quo non for the development of the economy. Yet information available on the extent and types of natural resources, is very much limited. For example; data on the area covered by forests are outdated, inconsistent and based on unfounded individual guess estimates. An attempt is being made to estimate the forest cover of the country on the basis of land cover studies conducted by Blue Nile River Basin, Tekeze Basin and Woody Biomass Projects. Nonetheless, the result would provide only the general picture on the area covered by forest but not the type and economic importance of species in the forest. There is a need, therefore, to survey the forest cover of the whole country on the basis of recent satellite imagery and analyze the type of species and their economic importance. Moreover, there is a need to establish a monitoring system in-order to facilitate the flow data on a regular basis.

Like wise, data on forest products for various uses are unavailable in organized and aggregated manner. For instance, since regions are provided with the mandate to give license for applicants who would like to process and use forest products, the data on forest products for timber, industrial use etc. are not available in aggregated form at national level. There is, therefore, a need to establish a system at national level that would help design a method for uninterrupted flow of organized data from different regions.

The data on the number of wildlife is restricted to National Parks and Sanctuaries. There is a need to survey sample areas in the whole country to estimate the total number of species (by type) available in the country. Data on environment, specifically on Solid Waste Management are also not available. The availability of such data are important to take preventive measures timely.

5.3 Identification of Statistical Data Gaps

The following table provides principal data gap's necessary for effective management of the environment and national resource. Subsequently, a medium term statistical programme have been proposed to meet statistical data need of the sector.

5.4: Statistical Data Gap Matrix - Environment and Natural Resource Sector

No	Indicator/Data	Statistical Gap	Required Form And Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency*	Tolerable Lag		
1	Area covered by forest	– Available for south-west part of the country (about 300,000 km^2) [1] – Note available for the whole country	Forest types e.g. mountain, lowland, dry, rainforest, ownership	National, Region	Annually	2 months	MoA/ RADBs/ EPA	There is no information on the type of vegetation cover (e.g. grass land, wood land, primary forest etc.) and its extent Administrative Records/Survey
2	Area covered by Savanna Woodland	Not available	Savanna type/dominant species	National, Region	Annually	2 months	MoA/ RADBs/ EPA	Administrative Records/Survey
	Forest products							
3.1	Timber produced (in m^3)	Not available	Type/species, ownership	National, Region	Annually	2 months	MoA/ RADBs	Administrative Records/Survey
3.2	Charcoal produced (in ton)	Not available	Type/species, ownership	National, Region	Annually	2 months	MoA/ RADBs	Administrative Records/Survey
3.3	Fuel wood product (in ton)	Not available	Type/species, ownership	National, Region	Annually	2 months	MoA/ RADBs	Administrative Records/Survey
3.4	Forest products used for construction (urban, rural, in m^3)	Not available	Type/species, ownership	National, Region	Annually	2 months	MoA/ RADBs/ BoA	Administrative Records/Survey
3.5	Forest products used for industrial use (in m^3)	Not available	Type/species, ownership	National, Region	Annually	2 months	MoA/ RADBs	Administrative Records/Survey
3.6	Gum produced from wood-land species (notably from Acacia Senegal)	Not available	Type of gum, ownership	National, Region	Annually	2 months	MoA/ RADBs	Administrative Records/Survey

* Frequency indicated in this table refers only for Administrative Records. For surveys, the frequency is indicated in the priority table.

5.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form And Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
3.7	Myrrh obtained from woodland tree species	Not available	By producer type	National, Region	Annually	2 months	MoA/ RADBs	Administrative Records/Survey
3.8	Incense produced from woodland tree species	Not available	Type of incense producer	National, Region	Annually	2 months	MoA/ RADBs	Administrative Records/Survey
4	Nursery sites	Not available	Type, number, species, ownership	National, Regional	Every 5 years	1 year	CSA, MOA, RADBs	Administrative Records/Survey
5	Rate of soil degradation e.g. erosion,. salinization, fertility decline	Not available	Soil type, type of degradation, erosion area	National, Region	Annually	2 months	MoA/ RADBs / EPA/EARO, MOWR	Administrative Records/Survey
6	Soil and water conservation measures	Inadequate	Type (indigenous, improved) and area	National, Region	Every 5 years	1 year	MOA, RADBs, EARO, CSA	
7	Wild life	Not available	Ecosystems species, parks	National	Annually	2 months	EWCO	Administrative Records/Survey
8	Wild life hunted legally	Not available	Ecosystems, species	National	Annually	2 months	EWCO	Administrative Records/Survey
9	Wildlife hunted illegally	Not available	Species	National	Annually	2 months	EWCO	Administrative Records/Survey
10	Solid Waste Management	Not available	Type of solid waste (organic and inorganic)	National, Regional	Every 3 years	1 year	Regional municipalities, CSA, EPA and Regional Industry Bureau	Administrative Records/Survey

5.5: Medium Term Program Matrix - Environment and Natural Resource Sector

No	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Survey of forest, forest products and nursery sites	Covers only part of the country no census so far	– Lack of in-built mechanisms for information transmission – Lack of facility – Lack of trained manpower on forest survey methodologies – Lack of budget – Lack of coordination and standardization of data on the sector	To estimate actual rate of deforestation and area of vegetation cover	Create awareness among data generators about the need for information on the sector	– Comprehensive data of vegetation cover and its usage – Comprehensive data on rate of deforestation	Support expansion of woody biomass inventory to cover whole country	MOA/ RADBs/ CSA	Administrative Record/Survey
2	Survey on wood-land trees species	Incomplete and inconsistent	No mechanisms for information transmission	To estimate those covered by woodland species and their utilization	Enhance capacity	Extent of coverage of woodland and tree species and their utilization	Encourage expansion of woody biomass inventory activities to cover the whole country	MOA/ RADBs/ CSA	Administrative Record/Survey
3	Soil survey	No available	Mechanisms for information transmission	To know type of soil, their use and extent of soil degradation	Provision of the necessary facility	Type of soil, their use and rate of degradation	Collect and organize existing information on soil surveys, susceptibility of soil types to degradation, and extent of degradation on sample basis, where data exists	MOA/ERO	Includes type of soil, extent and rate of soil degradation Administrative Record/Survey

5.5: (Cont'd)

No	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
4	Survey on wildlife	Not available	No mechanisms for information transmission	To know distribution and abundance of wildlife and threats to wild life	Provision of the necessary facility and enhancement of capacity	Number, type and use of wildlife	Support EWCO and regional agriculture bureaus to update surveys on wildlife in protected areas	EWCO/CSA	Administrative Record/Survey
5	Survey of wetlands	Not available	No mechanisms for information transmission	To know the extent and distribution of wet-lands	Establish a responsible organ and unit the necessary facility	Data on the number and size of wetlands	Establish wet land inventory system	EWCO/CSA	Administrative Record/Survey
6	Solid Waste Management	Not available	Not given due attention	To know the total waste disposed unloaded and loaded by type	Enhance capacity, create awareness among data generators about the need for the information on solid wastes	Comprehensive data on solid wastes	Prepare questionnaire, collect and disseminate data, undertake survey, regularize the flow of administrative recourse, produce comprehensive report	Regional municipalities, CSA, EPA, and Industry Bureau	Administrative Record/Survey

6. INDUSTRY, TRADE AND TOURISM SECTOR STATISTICS

As per the UNSNA classification, industry sector includes large, medium, and small scale manufacturing, mining, quarrying, water, energy and construction. This section focus on the first two sub-sections and the rest will be treated separately. The contribution of the manufacturing sector for the national economy is relatively low with value-added share of less than 15 per cent from the GDP. However, it is one of the dynamic modern sectors showing changes over time.

The trade sector fall under distributive service in the UNSNA classification of economic activities. Trade as a service basically referees to two major categories of transaction, domestic and foreign. A reliable, timely and adequate data on trade serves at least two important purposes. First, it helps to understand the value added of the sector as well as the efficiency of the service in maximizing producer and consumer welfare. Second, for a number of commodities, measuring the magnitude and pattern of output and movement of goods could only be measured at a point where trading activity takes place.

Tourism, is still at its infancy in Ethiopia. Much effort is needed to promote and develop the service so that its contribution to the economy can be increased. For this, a comprehensive and reliable information on resource potential, infrastructural facilities and present sector value added becomes crucial.

The subsequent paragraphs are devoted to understand data requirement for designing effective sector development programmes, monitor changes and evaluate outcomes.

6.1 Review of Statistical Data Requirement

6.1.1 Industry

In order to guide the sectors development along a sustainable track, statistical data regarding changes occurring in the sector and factors influencing its performance become necessary. Broadly, statistical data requirement of the sector should at least be compatible with the need for estimating the sectors value-added. This in turn calls for data on among other things: value of input utilized and value of output produced both at current and constant price as well as value of sales of output at current and constant price.

Moreover, analysis of the impact of any policy change on the sector might require a much detailed data. The pace of industrialization and structure of the sector could only be known with data on their number, by the type of activity, size

ownership, capital, employment, absorption, output capacity. Moreover, the efficiency or productivity of the sector could only be measured with adequate statistical evidence not only on the output side but also on inputs. In this regard data on the magnitude of the various inputs including, fixed and working capital, number of persons engaged in production and support activities, the cost of labour, that is, wage and salary, type value of input required or utilized including foreign exchange utilization. Analysis of its performance from export diversification and regional equality perspective require data disaggregated by target market as well as regional distribution of industries.

Unlike medium and large scale industries, the economic contribution Household and Small Scale Industries HHSSI is believed to be relatively higher but not yet fully accounted so far. Particularly, the issues of a new sector development strategy by the government underline the importance attached to this sector. Accordingly, a much robust information becomes essential to monitor the changes over time, and its sector linkages. The overall statistical data needed more or less resemble the one discussed under manufacturing. However, the spatially disaggregation information here is more demanded as they might also present in both rural and urban areas.

6.1.2 Trade and Tourism Sector

Recent developments in the domestic and foreign trade in both policy and performance wise entails the importance attached to the sector under the on-going economic reform in Ethiopia. Moreover, the increasing participation of the private sector in the economy by and large is accounted to this sector. In such an environment, sufficient data to explain who is working in which specific transaction, its value added, the direction of transaction, and the cost and return of these transactions becomes important. In this regard, the following list of information broadly represent the major data need of the sector.

- Number of licensed domestic traders (retailers, wholesales, services) and their capital.
- Prices (wholesale, retail, producers) on major consumables.
- Storage capacity of wholesales/grain traders.
- Profit/revenue of public enterprises
- Transport utilization of wholesales (owned, hired).
- Quantity purchase and sold of public enterprises.
- Purchase and sales of private traders.
- Domestic trade licenses issued, renewed and canceled.

- Various performance indicators of public and private trade e.g. purchased, sales, stock position, investment, capital, employment financial performance, ... etc.
- Number of licensed exporters/importers by activity, ownership, capital etc.
- Value of exports/imports by commodity, services, ownership, destination, country of origins.
- Volume and value of coffee arrived at Auction market, contract sales, shipment, destination.
- Domestic supply, consumption, marketable surplus of
- Unit value of major exports/imports commodities.
- International prices, supply and demand conditions of major export/import items of Ethiopia.
- Number of tourists by country of origin, purpose of visit, length of stay.
- Tourism and Hotel facilities (accommodation, capacity, occupancy rate).
- Investment by public and private on tourism promotion and development.
- Employment level of public and private tourism.
- Foreign currency earning from tourism.
- Activities on domestic tourism

6.2 Assessment of the Existing Statistical Data

6.2.1 Manufacturing (Large, Medium, and Small Scale and Cottage/Handicrafts)

Concerning public enterprises, information is available at national and regional levels on yearly basis. A comprehensive data on manufacturing industries which also includes private enterprises at national and regional is available on the CSA annual survey of manufacturing.

The data available on handicrafts and cottage industries is detail including total output, values of raw materials used, number of persons engaged, wages and salaries, gross values of production, fixed assets, investment, value added, etc., at national and regional levels for both urban and rural areas.

In state owned establishments an assessment of the existing data base indicates that most of the required information is captured by CSA's annual survey. The only major draw backs concerning this sector is that the data is not provided at

constant prices. The same holds true for privately owned manufacturing establishments, in areas of handicrafts and cottage industries until 1997 the data gap was serious now, with the CSA survey being strengthened by incorporating price information in its recent issue, the data base seems fairly adequate.

6.2.2 Trade and Tourism

With regard to domestic trade, nearly all, except few data items are available. Among the gaps, two crucial problems standout. The first is related to public/government enterprise, where some of the data (for example, purchases, sales, distribution by customers, stock movement) are not adequate and lack continuity in time. Unlike for public enterprises, for the private sector, there is no systematic and regular flow of information/data. Information (data) on license issued, canceled or renewed for domestic trade/service is insufficient.

Concerning foreign trade, most of the required data are available for use; but not up to date particularly external trade statistics compiled by the Customs Authority. As these data/information capture actual imports transaction, users have to weight up to 6 months to get new information. However, in recent years CSA is trying to release the data in this sector only with a tolerable lag of three months.

With regard to tourism, though incomplete, data can be found for the public sector. Thus information at national level including disaggregated data on tourist arrival, average length of stay are not available. Information on the mode of transport used by tourists is available in raw/unprocessed form/partly. As far as the private sector value added is concerned, the available data is so negligible that no reasonable inference could be made out of it. Furthermore, data on the country's resource potential need to be made available, and data on existing capacity should be updated.

6.3 Identification of Statistical Data Gaps

The following matrix contain the major data gaps followed by a medium term statistical program for these sectors.

6.4: Statistical Data Gap Matrix - Industry, Trade and Tourism Sector

Sub-Sector: Manufacturing (Large and Medium)

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
1	Number of Large and Medium Manufacturing Industry	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	
2	Capacity utilization in per cent by industrial group	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	
3	Value of input utilization (at current and constant price)	Available*	By product/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	
4	Fixed and working capital	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA /MOTI/ITBRS	
5	Value of output (at current and constant price) by industrial group	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	
6	Value of sales of output (at current and constant price)	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	
7	Number of persons engaged	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	
8	Regional distribution by industrial group	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	
9	Value added/by sub sector	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	
10	Wages and salaries by sub-sector	Available*	By sub-sector/ ownership	National/ Regional	Annually	8 months maximum	CSA/GESA/ MOTI/ITBRS	

* Except at constant prices.

6.4: (Cont'd)

Sub-Sector: Cottage/Handicrafts and Small Scale Manufacturing Industries

No.	Indicator/Data	Statistical Gap	Required Form and Frequency					Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag	Focal Institution	
1	Number of Handicrafts and Small Scale Industries	Available*	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
2	Capacity utilization in per cent by	Available*	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
3	Value of input utilization (at current and constant price)	Incomplete	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
4	Fixed and working capital	Available*	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
5	Value of output (at current and constant price)	Incomplete	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
6	Value of sales of output (at current and constant price)	Incomplete	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
7	Number of persons engaged	Available*	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
8	Regional distribution	Available*	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
9	Value added	Available*	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	
10	Wages and salary	Available*	By industrial group	National, rural, urban	Every 3 years	10 months maximum	CSA/MOTI/ ITBRS	

* Except at constant prices.

6.4: (Cont'd)

Sub-Sector: Trade and Tourism

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
1	**A. Domestic Trade** Number of licensed domestic traders (retail wholesale, service)	Not available	Type of trade	National/ Regional	Every 3 years	6 months	MOTI and Regional Bureau/ CSA	
2	Prices of (wholesale, retail, producers) on major consumable	Limited coverage	Type of trade	National/ Regional	Every 3 years	6 months	CSA/EGTE	
3	Distribution of traders	Not available	By type of trade	National/ Regional	Every 3 years	6 months	CSA/EGTE	
4	Transport utilization of whole sellers (owned, hired)	Not available	Type of ownership	National/ Regional	Every 3 years	6 months	CSA	
5	Storage capacity of whole sellers/Grain traders	Not available	Type of ownership	National/ Regional	Every 3 years	6 months	CSA	
6	Profit/Revenue of public enterprises	Not available	Type of trade	National/ Regional	Every 3 years	6 months	MOTI/ EGTE/ CSA MWITE/	
7	Quantity purchased and sold of public enterprises	Not available	Type of trade	National/ Regional	Every 3 years	6 months	EGTE/ CSA MWITE	
8	Domestic trade licenses issued, renewed and concealed	Not available	Type of ownership	National/ Regional	Every 3 years	6 months	EGTE/ CSA MWITE	
9	Purchases, sales and capital of private traders	Not available	Type of ownership	National/ Regional	Every 3 years	6 months	EGTE/ CSA MWITE	

6.4: (Cont'd)

Sub-Sector: Trade and Tourism

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
	B. Foreign Trade							
1	No. of license exported importers by (activity), ownership, capital, ... etc.,	Not systematically reported	By activity, ownership, capital	National	Annually	6 months	MOTI / CSA	
2	Value of exports/Imports by (commodity, services, ownership, destination country of origin)	Available lag of 2 to 3 years	– Commodity – Ownership – Country of original – Destination	National	Biannually and annually	6 months for annual 3 months for biannual	CSA/CA	
3	Volume and value coffee (arrival at auction market, contract sale, shipment, destination)	Available grade classification and Auction Price	– Commodity – Ownership – Country of original – Destination	National	Monthly and annually	1 month for monthly and 6 months for annually	CA/CSA/ CTA	
4	Unit value of major export and import commodities	Not systematically reported	– Commodity – Ownership – Country of original – Destination	National	Annually	6 months	CSA/ CA/ NBE	
5	International price, supply and demand conditions of major export and import items of Ethiopian interest	Not available	– Commodity – Ownership – Country of original – Destination	National	Quarterly, biannually and annually	1 month, 3 months and 6 months respectively	MOTI	
6	Domestic Supply, consumption and marketable surplus of exportable	Not available	– Commodity – Ownership – Country of original – Destination	National	Annually	6 months	CSA/CA/ CTA	

6.4: (Cont'd)

Sub-Sector: Trade and Tourism

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
	C. Tourism							
1	No. of tourists by (country of origin, purpose of visit, length of stay)	Lag and insufficient coverage	– Country of origin – Purpose – Length of time	National regional	Annually/ monthly	2 months	ETC/CSA	Administration / CSA
2	Tourism and Hotel facilities (accommodation, capacity, occupancy rates)	Lack of standard classification entirely unavailable for private operators	– Type of acc – Capacity – Occupancy rates	National regional	Annually/ monthly	2 months	ETC/CSA	Public/private/ Administration / CSA
3	Investment by public and private on tourism promotion and development	Not available	Type, purpose	National/ Regional	Annually	2 months	ETC/ETA/ MOTI	Administration / CSA
4	Employment level of public and private tourism	Not available for the private	Type	National/ Regional	Annually	2 months	ETC/CSA	Administration /CSA
5	Activities on domestic tourism	Not available for the private	Purpose	National/ Regional	Annually	2 months	ETC/CSA	Administration / CSA
6	Foreign currency earnings from tourism	Not available for the private	Type	National/ Regional	Annually	2 months	ETC/CSA/ NBE	Administration / CSA

6.5: Medium Term Program Matrix - Industry, Trade and Tourism

Sub-Sector: Small Scale & Handicrafts

No.	Statistical Program	Problem of the information	Cause of the problem	Objective of the program	Program strategy	Expected output	Major Activities	Focal Institution	Remark
1	Survey of small scale manufacturing industries	One time survey data (1995/96) no time series data for trade analysis	Lack of higher level trained manpower and resource limitation	To provide up-to-dated information	Building institutional capability	Comprehensive data on the sub-sector	Collect, process, and disseminate the result	CSA	Survey
2	Survey of cottage & handicrafts manufacturing industries	One time survey data (1995/96) no time series data for trade analysis	Resource limitation	To generate continuous flow of data	Building institutional capacity	Comprehensive data on the sub-sector	– Collect, process and disseminate results of survey	CSA	Survey

6.5: (Cont'd)

Sub-Sector: Large and Medium Scale Manufacturing Industries

No.	Statistical Program	Problem of the information	Cause of the problem	Objective of the program	Program strategy	Expected output	Major Activities	Focal Institution	Remark
1	Survey of Medium and Large Scale Manufacturing Industries	Industries take few months to cloth their accounts, hence incur some time lag to collect the data and process	time taken between end of activities and closing account of industries	To closely monitor developments in the manufacturing sector	Conducting survey at factory level process and disseminate the results	Manufacturing sector survey (annually with no more than 7 months lag)	Collect, process and disseminate results of the survey	CSA	Survey

6.5: (Cont'd)

Sub-Sector: Trade and Tourism

No.	Statistical Program	Problem of the information	Cause of the problem	Objective of the program	Program strategy	Expected output	Major Activities	Focal Institution	Remark
1	**Domestic Trade**								
	Survey of Distributive Trade & Services	– Not comprehensive, inadequate level of disagregation, – Data describing the activities of the sector are not included in a comprehensive manner	– Technical capacity – Lack of coordination of work between CSA and other institutions	To compile comprehensive data on private traders	Strengthen data compilation capacity	Comprehensive, regionally disagregated data on private traders (every 3 years)	– collect data on traders – process raw data – compile, analyze and publish timely data	CSA/ MOTI	Survey
2	**Foreign Trade**								
	Compilation of foreign trade Statistics	Time lag	Shortage of personnel and processing facilities	To compile and analyze complete and timely data	Strengthen data compilation and processing capacity	Up-to-date & complete data on foreign trade	Process timely data, Compile, analyze and publish	CSA /ECA/ NBE	Administration
3	**Tourism**								
	Compilation of Tourism Statistics	Not comprehensive, inadequate disagrgation, data describing the activities of the sector are not included in a comprehensive manner	Shortage of personnel processing facilities	To compile comprehensive data on private Sector	Strengthen data compilation capacity	Comprehensive, regionally disagregated data on the Sector	– Obtain data from Tourism Commission – Process raw data Compile, analyze and publish	CSA/ ETC	Administration
4	Survey of Hotels	Comprehensive and exhaustive data not available	Shortage of personnel and processing facilities	To compile comprehensive data on private and public sectors	Strengthen data compilation capacity	Comprehensive regionally disagregated data on the sectors	Conduct survey, process, compile analyze and publish survey results	CSA/ETC/ NBE	Administration

7. MINING & QUARRYING STATISTICS

A wide variety of minerals including metals, non-metals as well as industrial and energy minerals including various types of quarrying activities are known to exist in the country. However the exploitation and development of these minerals is at its infant stage. The existing level of development of the sector has possibly affected the demand for data and its generation and availability for sector management. With the envisaged progress and development of the sector however require sufficient statistical data in the area.

7.1 Review of Statistical Data Requirements

Broadly, the following basic statistical information should be generated, compiled and made available for users by the respective sub-sectors within the Ministry of Mines and Energy and CSA. The data items are required annually at the national level.

- Mineral production, sales, domestic consumption and import by type.
- Mineral Statistics on location, reserve, grade and use by type.
- Inputs in mining and quarrying activities by type.
- Investment expenditure on mining and exploration activities by source (Regional/Federal).
- Manpower by age, gender, profession, job classification and salary scheme.
- Unit cost of explanation and mining activities.
- Private sector participation (local and foreign).
- Statistics on mineral exploration/prospections activities by location and volume of work).

7.2 Assessment of the Existing Statistical Data

As the existing data base indicates, information is available on; areas of mapping, geological exploration, production and sales of minerals. Investment expenditure,

manpower and financial data, data on mineral reserve and grade are available but not as required.

There is totally no information flow on domestic consumption of minerals, imports of minerals, mineral market studies from the concerned sub-sectors or enterprises, MME and RMEB. Statistics on artisan mining and cost is lacking. Some of the mineral resource data are not compiled in a standardized statistical format. The major factor contributing to the creation of these data gaps is of organizational nature.

7.3 Identification of Data Gaps

The following matrix identifies statistical data gaps in mining sector and suggests the form, timing and frequency in which these data should be made available for users. Subsequently, the program matrix outline the sector statistical programmes for the coming five years.

7.4: Statistical Data Gap Matrix - Mining and Quarrying Sector

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
1	Quarrying activities, volume of materials produced and sold	Not available	By size, type	National and Regional	Every 3 years	Six months	CSA/ RMEB/MME	Census/ Survey and Administrative Record
2	Domestic consumption of minerals	Available but scattered	By type . . .	National and Regional	Annually	Two months	MME/RMEB/ CSA	Administrative Record
3	Import of minerals	Available but scattered	By type . . .	National and Regional	Annually	Two months	MME/CSA	Administrative Record
4	Mineral reserves and production capacity	Data scattered	By type . . .	National and Regional	Annually	Two months	MME/CSA	Administrative Record
5	Exploration and mining investment	Data scattered	By source . . .	National and Regional	Annually	Two months	MME/CSA	Administrative Record
6	Private sector participation size, number, capital, license	Data scattered	By size, number, type	National and Regional	Annually	Two months	MME/CSA	Administrative Record

7.5: Medium Term Statistical Program Matrix - Mining and Quarrying Sector

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Survey of Quarrying	Not available	The availability of this data require, the coordination of RMEB and MME. This coordination is lacking	To know the number of firms and individuals engaged in quarrying, location, manpower involved the volume of quarried materials produced and sold by types	– Undertake survey by considering large scale sample sizes – Establish strong data base at RMEB and MME/ CSA	Firms involved in quarrying activities will be known, quantities of quarried materials by types will be determined	Communicate with the concerned institutions, Devise questionnaires	CSA/MME/ RMEB	Census/ Survey
2	Compilation of mining statistics	The present state of data is scattered	Lack of accountability for the supply of information to pertinent Government organizations	To quantify and identify the different types of domestic and imported minerals and understand their economic contribution	– Develop and strengthen information network – Identify and – record private and governmental mineral statistic producers – Establish strong data base	Comprehensive data on mineral resources	Communicate the respective authorities and entrepreneurs – Devise appropriate data collection mechanism	MME/RME B/ CSA	Adm. Records

8. ENERGY SECTOR STATISTICS

The Energy sector is made up of three sub-sectors, of which the power sub-sector is the most dominant, from the point of view of the contribution to its economic development. Petroleum and traditional/ alternative sources of energy constituting the rest.

Electricity within the power sub-sector is generated, transmitted and distributed under the Ethiopian Electric Power Corporation (EEPCO) which is a public corporation managed and supervised by a Board of management.

Data for quantity of electricity produced, transmitted or sold can be obtained from standard meters and poses no problems. However, data on costs of production/transmission and distribution are site specific and therefore constitute a major challenge.

Ethiopia imports refined petroleum products. The central coordination task regarding imports and wholesale distribution rests upon the authority of the Ethiopian Petroleum Enterprise (EPE). The responsibilities entrusted upon EPE don't require sophisticated organizational set up. Its day-to-day activities are specific and the statistical information base is also specific and basically simple. However, data base development for consumption of petroleum products by various economic and social sectors is a major challenge.

Regarding traditional sources of energy, data on consumption and prices of traditional fuels is important but totally lacking.

8.1 Review of Statistical Data Requirements

Broadly, statistical data on the following areas are believed crucial for the energy sector development management.

- Energy supplies by sources of energy.
- Energy consumption and Demand: Sectoral consumption and demand by energy source, demand forecasts, consumption per unit of output are the different components to be included.
- Energy prices.
- Financial information of supplier institutions.
- Cost of Energy supply which constitute costs of energy imports, energy/transmission and distribution, etc. These major information types should be made available as a base line information for effective planning and development endeavors of the sector.
- Consumption and market prices of traditional energy sources.

8.2 Assessment of Existing Statistical Data

Energy supplies in terms of fuel and electricity are available but when traditional/alternative sources of energy are considered, the information is not complete.

In CSA's survey reports on large and medium scale manufacturing and electricity industry, one can find data on installed generating capacity and electricity production, electricity sales and revenue generated, intermediate costs, values of fixed asset in the electricity industry, ratios of costs of energy consumption to industrial costs by ownership. Energy consumption and demand by different uses is partially available. In urban housing units the source of lighting have been surveyed. Regarding price, energy prices for petroleum, average retail prices of some sources of energy in rural and urban communities are available. The following paragraph provide on the existing database of the energy sector.

8.2.1 Power Sub-Sector

- Some essential activities haven't been undertaken so far due to technical incapability, lack of appropriate finance and the like. Therefore, a gap is bound to persist between what is required and what is available. This point is relevant especially to the information on energy supplies.

- The power sub-sector is an import dependent sub-sector. The bulk of its operation is dependent upon imported machineries, tools and other materials more than any other sector in the Ethiopian economy. This by itself poses problems to easily capture information related to technological parameters. This must be seen as an information gap brought about by technological gap.

- Economic costs of electricity supply are not available in the power supply system. The conventional "cost of production accounting" is totally irrelevant to the nature of the production process in the power supply system. What is meant here is that there is no established methodology to arrive at unit costs of production. The same holds true for costs of transmission and distribution. Until some sort of applicable methodology is developed or adopted, the data gap will continue to persist.

- Classification of consumers by tariff category is taken to be synonymous with consumption by economic sectors. The tariff

category conceals consumption of some key sectors and fails to differentiate between distinct sectors. This poses a challenge when the need to target economic sectors becomes necessary.

- Apart from the above mentioned points, the central issue behind the information gap revolves around the organizational structure of the Ethiopian Electric Power Corporation (EEPCO). Most of the data items labeled as "partially available" are ascribeable to organizational deficiency. In other words, statistical information has not received proper attention.

8.2.2 Petroleum Sub-Sector

The petroleum sub-sector is relatively rich in information compared to other sub-sectors within the energy sector .We note the following deficiency however.

- As regards consumption and demand, it is difficult to capture Sectoral consumption at the wholesale or retail trade level. There is no tradition of energy accounting in the productive as well as service rendering sectors of the economy. A certain mechanism of recording what is consumed for what purpose must be sought to ameliorate the information gap.

8.2.3 Alternative Sources of Energy/Traditional Sources of Energy Sub-Sector

With regard to traditional and alternative sources of energy, data acquisition requires sample surveys to be undertaken from time to time. It is thus potentially more difficult to compile data in this area.

8.3 Identification of Statistical Data Gaps

As per the above assessment, the following statistical gaps have been identified along with suggested forms, frequency and timing of its requirement. This is followed by a proposed statistical program of the sector that are expected to be covered within the medium-term program period.

8.4: Statistical Data Gap Matrix - Energy Sector

No.	Indicator/data	Statistical gap	Required form & Frequency				Focal Institute	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
1	Energy Supplies	partially available	by source of energy	Sectoral/Regional National	Quarterly	one month	EEPCO/EPE/ EREC/CSA	Administrative Record
2	Energy Consumption	Partially available	by energy source, by sectors (industry, household, commerce etc.)	Sectoral/ Regional/ National	Annually	3 months	EEPCO/EPE/ EREC/ CSA	Administrative Record
3	Energy prices	– Economic prices are not available – Energy prices are partially available	by fuel type, by towns, by end -use	Rural/urban/ Regional/ National	Annually	3 months	EPE/ CSA	Administrative Record
4	Costs of Energy supplies							
	– Cost of energy production	Not available	by sub-sector	Sectoral/ Regional/ National	Annually	3 months	EEPCO/CSA	Administrative Record
	– Cost of transport, & transmission, distribution	Not available	by sub-sector	Sectoral/ Regional/ National	Annually	3 months	EEPCO/ EPE/CSA	Administrative Record
5	Financial Information and Organizational Logistics in the Energy sector	Partially available	by sector	Sectoral	Annually	6 months	EEPCO/CSA	Administrative Record

EEPCO - Ethiopian Electric Power Corporation
EPE - Ethiopian Petroleum Enterprise
EREC - Ethiopian Rural Energy Center.

8.5: Medium Term Program Matrix - Energy Sector

No	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Compilation of production, supply and consumption data for electricity and Petroleum Products	Partially available	– Failure to record, compile and update information – Lack of recording mechanisms	– To obtain the magnitude of different sources of energy production, supply and consumption – To arrive at sectoral energy consumption ranges	– Develop data recording mechanisms for petroleum, electrically production supply and consumption and establish procedures	Sectoral consumption per unit of output, quantities of energy production and consumption	– Design formats – design reporting – procedures – collect, data using the appropriate formats	EPE; EEPCO/ CSA	Adm. Records
2	Survey of Traditional Energy (Woody Biomass, Animal and crop residue, charcoal, Bio-gas and Briquette) consumption data	Partially available; not updated regularly	Lack of institutional capability to undertake continuous survey with respect to its variability by space and time	– To obtain quantities of traditional energy consumption by sources and region and assess variations	– Update previous studies – undertake sample surveys and see their harmony with previous findings	consumption levels of this energy for all regions will be determined	– Devise questionnaires – Involve relevant Regional Bureaus in the survey	CSA/ EREC/ Regional Bureaus	Census/ Survey
3	Compilation of energy prices by fuel type for traditional energy forms	Data not available for traditional energy; not updated regularly	lack of resource to collect actual price data from regions	– To identity energy prices and costs at regional level, assess regional price variations and take appropriate measures	– Create information flow networks (formal informal) at various administrative units and strengthen their capacities – Receive and follow up information from the networks	Energy prices and costs, cost and price variations etc. will be obtained	– Involve relevant Woreda, Zonal, Regional institutions in the data collection network	EREC/ CSA	Adm. Records

9. WATER SECTOR STATISTICS

The water sector includes water supply and sanitation services, irrigation, hydrology, and meteorology. This statistical program refers to those data to be collected, analyzed and distributed to different users on the various facets of the sector. The institution responsible to undertake the above tasks is primarily the Ministry of Water Resources (MWR) with the cooperation of the Central Statistical Authority (CSA).

Most of the data collected so far by the sector ministry are basic data which are mostly used to prepare development projects and those used for academic and research purposes. Although they are key inputs for these activities some are also used to assess and monitor the conditions of social services such as water supply and sanitation. Some are also used for early warning particularly in the agricultural sector.

9.1 Review of Statistical Data Requirements

Commonly required statistical data for economic policy analysis and planning purposes on water sector should enable to answer the following questions.

- What percentages of the rural/urban and total population have safe and adequate water supply services?
- What percentages of the rural, urban and total population have access to proper sanitation facilities?
- How are existing levels of drinking water consumption compared to WHO's standard?
- What are the existing rural and urban water supply tariff?
- What percentage of our water resources is used for various development activities irrigation, water supply, hydropower etc.
- What is the size of potential land for irrigation and the actual land under irrigation.

- What are the numbers, types and conditions of hydrological and meteorological stations that exist in the country and how are the regional distributions?

- What is the size of hydropower potential and the actual installed capacity of existing plants.

The overall water sector date requirements therefore result on the above issues.

9.2 Assessment of the Existing Statistical Data

One of the basic problems encountered in undertaking water resources development projects for various uses is lack of appropriate data/information both in quality and quantity.

Attempts were made by the former Water Supply and Sewerage Authority (WSSA) to survey the number of different rural water supply schemes, rural and urban population served by safe drinking water and sanitation services (WSSA, Statistical Reviews 1987 and 1994). According to the Master Plan for the Development of Surface Water Resources in the Awash Basin (Draft Final Report), in eight basins, 153,359 hectares are irrigated out of the 2.7 million hectares of irrigable land (EVDSA, 1989). Though such crude figures exist, there is still the need to undertake thorough study and come-up with up-to-date and reliable sectoral data. Information on water supply situation at regional level can be obtained from population and Housing Census though lacking comprehensiveness.

Though difficult to provide accurate data on per-capita water consumption and urban water consumption by different users at a national level, such information are available for towns for which Water Supply Feasibility studies have been undertaken. Similarly data on surface and ground water potential and utilization are available for River Basins whose Master Plan Studies have been completed. However, these information are considered to be partially available. Regarding hydrological and meteorological stations the numbers, type and status and their regional distribution patterns are recorded.

The sector information to be surveyed, therefore should include water supply production, consumption, population served, per capita water consumption and expenditure, sanitation coverage water supply tariff in both rural and urban communities hydropower potential and utilized, volumes of ground and surface water potential and the extent to which these resources are utilized, the potential

and actual small, medium and large scale irrigation coverage, unit costs for different water resources development activities are also required.

The reason for the inadequacy and in some cases the absence of water sector data is the low level of institutional capacity to under take data collection activities and also the importance attached to such information. It will take a long time to bridge or at least narrow down the data gap that presently exists. The comparatively huge resource requirement both financial and physical and the length of time such studies would take pause difficulty in narrowing down the gaps in a short period of time. NGO's reluctance to report to MWR regarding their contribution to the rural water supply development, lack of information flows between concerned Regional Bureaux and MWR, absence of regular data recording system have contributed to the uncertainty and unreliability of water supply and sanitation coverage.

9.3 Identification of Statistical Data Gaps

The data gaps as portrayed in the matrix are grouped into two programs namely survey of water supply, consumption and sanitation services and survey of potential and utilized water resources by different uses. The subsequently proposed sector statistical programs are expected to be implemented in short, medium and long periods depending on their nature.

9.4: Statistical Data Gap Matrix - Water Sector

No.	Indicator/data	Statistical gap	Required form and frequency				Focal Institution	Remark
			Level of disaggregation	Level of reporting	Frequency	Tolerable lag		
1	Water supply result level and coverage	Partially available	Size and percentage of population served by house & yard connections, public taps, vendors, rural schemes	Rural, Urban, Woreda Regional, National	Every 5 years	3 months	CSA/MWR and Regional bureaus	Survey
2	Water consumption	partially available	By municipalities, industries, government institutions, commerce and households	Rural, urban, Regional, National	Every 5 years	3 months	CSA/MWR and Regional bureaus	Survey
3	Per capita water consumption	Partially available	By types of connection (house & yard connection, public taps) purposes (dish washing, laundry, bathing, drinking)	Rural Urban, Regional National	Every 5 years	3 months	CSA/MWR Regional bureaus	Survey
4	Sanitation coverage	Partially available	By types of facilities i.e. sewerage, flush toilets pit latrines, septic tanks, by volume of waste disposal using vacuum trucks	Rural, Urban, Regional National	Every 5 years	3 months	CSA/MWR/ Regional bureaus, MoH	Survey
5	Volume of ground and surface water potential	partially available	By various uses i.e. irrigation, hydropower, drinking water supply	Regional, National	Every 10 years	6 months	CSA/MWR/ Regional bureaus	Survey
6	Water supplying tariff	Partially available	By consumption categories	Rural, urban, regional and national	Every 5 years	3 months	MWR/Regional bureaus	Administrative Record
7	Number of hydrological and meteorological stations	Available but requires inventory	By type and year of establishment	Regional/National	Every 3 years	3 months	MWN/Regional bureaus	Administrative Record

9.4: (Cont'd)

No.	Indicator/data	Statistical gap	Required form and frequency				Focal Institution	Remark
			Level of disaggregation	Level of Reporting	Frequency	Tolerable lag		
8	Volume of water utilized	Partially available	by various uses i.e. irrigation, hydropower, drinking water supply	Regional, National	Every 10 years	3 months	CSA/MWR/ Regional bureaus	Survey
9	Potentially irrigable, land and size of land under irrigation, i.e. small medium and large scale	partially available	by hectares	Regional, National	10 years for potential and annually for actual	6 months	CSA/MWR/ Regional bureaus	Survey
10	Unit costs of water Resource development activities	partially available but unreliable	by types of activities i.e. water supply, irrigation, hydropower etc.	Regional, National	Every 5 years	6 months	CSA/MWR/ Regional bureaus	Survey
11	Private sector's investment in water sector	Not available	by types of activities i.e. water supply provision of sanitation facilities, irrigation, water well drilling etc.	Rural, Urban, Regional, National	Annually	3 months	EIA/MWR/ Regional bureaus	Administrative Record

9.5: Medium Term Program Matrix - Water Sector

No	Statistical gap	Problem of the information	Cause of the problem	Objective of the program	Program strategy	Expected output	Major Activities	Focal Institution	Remark
1	Survey of water supply, consumption, and sanitation services	– Partially available	– Lack of information exchange between regions and center – Lack of inventory of water supply schemes – Lack of coordination among concerned Institution (NGOs, MWR, Municipalities)	To figure out the size of rural and urban population, that have access to potable water and sanitation facilities and also the number of towns and having water supply systems	Introduce a sustainable system of information exchange between regions and center, and regularize sector survey.	– Size of rural and urban population getting potable water and number of towns having piped water supply systems will be known – Per-capita water production and consumption – Water demand and supply projections – Number of different water supply schemes functioning and not functioning	– Conduct workshops – Provide training – Dispatch formats to regions on which data are filled in – Conduct extensive survey – Analyze data thus obtained using GIS – Provide logistics to Regions	CSA/ MWR/ Regional bureaus	Census/ Survey/ Administrative Record

9.5: (Cont'd)

No	Statistical gap	Problem of the information	Cause of the problem	Objective of the program	Program strategy	Expected output	Major Activities	Focal Institution	Remark
2	Survey of potential and utilized water resources by different uses (water supply, irrigation, hydropower etc.)	Partially available	Absence of data bank, incompleteness of River Basin Master Plan studies	To understand the country's ground and surface water resources potential and utilization including for irrigation hydroelectric power, drinking water etc.	Establish data bank, conduct a comprehensive river basin studies.	Comprehensive data on the water sector.	Collecting secondary information, plan for conducting river basin master plan and conduct studies as time and resource allow	CSA/MWR / Regional Bureaus	

10. CONSTRUCTION SECTOR STATISTICS

Construction activity may be defined generally as economic activity directed to the creation, renovation, repair or extension of fixed assets in the form of buildings, land improvements of engineering nature, and other such engineering constructions as roads, bridges, dams etc. More specifically, construction activity is an activity engaged in constructing, altering, repairing and demolition of buildings, highways and streets, bridges, sewers, water, electricity mains, airport and parking areas, dams, drainage, irrigation, flood control and water power projects and hydroelectric plants, pipelines, water wells, communication systems such as telephone and telegraph lines and related activities. An activity primarily engaged in performing mining services such as preparing and constructing mining sites and drilling crude oil and natural gas wells are also classified in this group.

The assembly and installation of the site of prefabricated integral parts into bridges, watertanks, storage and warehouses facilities, lift, ventilating and air conditioning, lighting and electric wiring, etc. system of buildings and all kinds of structure is a construction activity.

It is also important further to distinguish construction activity, as it may be carried out by **any enterprise** regardless of its industrial classification, and the "**construction industry proper**". The latter classification restricts the scope to enterprises mainly performing **contract construction**.

Construction activity may be carried out not only by enterprises classified in the "construction industry proper" (or simply the construction industry), but also a significant amount of construction activities in countries like Ethiopia are carried out by enterprises not classified to this sector. Such activity, incidental to the main activity of the enterprise will usually be predominantly own account construction, either for the enterprise itself or for its parent organization. Finally, a significant amount of construction in Ethiopia is expected to be own-account construction by households/individuals.

Thus, in organizational terms construction activity may be seen as being comprised of two major and five sub-components.

10.1 Review of Statistical Data Requirements

In order to fulfill the statistical data requirements of the sector, data that ought to be generated are expected to cover the following two major sub-categories of construction activities.

i. **Contract construction by:**

- **Construction Industry Proper:-** construction units whose main activity is contract construction including unregistered units and self employed individuals carrying out construction for others.

- **Non- Construction Units:-** carrying out construction but for which such contract construction is not the main activity.

ii. **Own-account Construction by:-**

- Construction units whose main activity is **Own Account Construction** for their parent non-construction enterprises.

- Non- Construction enterprises carrying out **Some Own Account Construction** incidental to the main activity - this component includes private Organizations and Government Ministries and Agencies engaged in public new construction work and capital repair and maintenance work for their small buildings, internal asphalt works and garages, etc. Without contractor.

- Own account construction by **Individuals/Households/Co-operatives** - individuals or co-operatives may construct and/or make capital repair and maintenance works without contractor by themselves.

The data need under each sub-category of construction activities include:

- Number of persons engaged.
- Wages and salaries.
- Value of construction put in place by type of construction work done.
- Total value of construction output by type of construction work done.
- Value of repair and maintenance work done by type of maintenance and repair work done.
- Cost and quantity of inputs used by type of construction work done.
- Other expenses directly related to construction and non-construction activities.

- Value of fixed assets, investment and working capital, etc.
- Building permits.

10.2 Assessment of the Existing Statistical Data

In 1994/95 CSA attempted to undertake construction survey on "construction industry proper" and the result was distributed in limited copies under the title "Results of the Survey of Contract Construction Activities". However essential information (key indicators) and sustainable flow of data such as value of new construction put in place, Maintenance costs, value added ratios, etc. are seriously in deficit in the construction activities. Specialized (research) studies are also unavailable or at best undocumented in the construction sector.

Concerning specific areas of the sector, the existing statistical data gap problems vary from one sub-sector (activity) to another. For instance, data on the building materials statistics are limited to industrial statistics of output of cement and large-scale centralized products or trade statistics on imported materials for construction.

There has been only one time snapshot survey on informal construction activities by CSA for the reference year 1996, which provided essential data on the sector. Statistics on the construction labor force refer to recognized contractors or registered professionals, but hardly give any indication of the comprehensive breakdown of artisan skill including large number of operators. Cost index for construction sector is non existent. Although, some of the data needed may be acquired from administrative records, they usually differ from the existing situation. A case in point in this regard is the licensed contractors who are not active in the industry.

With respect to road construction, it can be said that data on roads construction under the management of the Federal Government are available except that they are not regularly updated. The length of all newly constructed trunk and major link-roads is known. The cost of upgrading, rehabilitation and maintenance of these roads is well recorded. The capacity of the executing agency, ERA and that of the registered private contractors is also known.

In areas of residential and non-residential building construction, the activity is performed by the Federal Government, Regional Governments, Public Enterprises and the Private Sector. Since the activity is carried out by different actors, comprehensive data on this area is not readily available at the national level, and hence there still exists a serious statistical data gap.

Statistics is scanty on rural construction, especially, on the construction of rural houses (tukuls), cost structure of rural homes and other construction activities by communities.

10.3 Identification of Statistical Data Gaps

The above discussions have helped identify the prevailing data gap in each sub-sector of the construction sector. The data gaps identified and the umbrella programs proposed so as to be able bridge these gaps are described in the following data gap and program matrices.

10.4: Statistical Data Gap/Need Matrix - Construction Sector

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Local Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Gap		
1	Road Network	Available but not complete	length, type standard	National, Regional	Yearly	one year	ERA, Regions/ CSA	
2	Road density	Available but not complete	Area, population	National, Regional	Yearly	one year	ERA, Regions/ CSA	
3	Road Condition	Available but not complete	Area, population	National, Regional	Yearly	one year	ERA, Regions/ CSA	
4	Road finance expenditure	Available but not complete	construction & maintenance	National, Regional	Yearly	one year	ERA, Regions/ CSA	
5	Vehicle population	Not updated	cost, source type	National	Yearly	one year	RTA/ CSA	
6	Fuel consumption	Not updated		National	Yearly	one year	EPC/ CSA	
7	Capacity of ERA	Not updated	construction & maintenance	National	Yearly	one year	ERA	
8	Road Construction materials	Available but not complete	Domestic produce & imported	National Regional	Yearly	one year	ERA, Region/ CSA	
9	Cost of construction materials	Available but not complete	Domestic produce & imported	National Regional	Yearly	one year	ERA, Region/ CSA	
10	Road Design	Not updated	type, cost	National	Yearly	one year	ERA & design Enterprises	
11	Road supervision	Not updated	type, cost	National	Yearly	one year	ERA & design Enterprises	
12	Bridge design	Not updated	type, cost	National	Yearly	one year	ERA & design Enterprises	
13	Road Contracting & design consultants.	Not updated	Catagory, Capacity	National	Yearly	one year	ERA & design Enterprises	

10.4: (Cont'd)

Sub-Sector: Building

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Gap		
1	Building construction							
	1.1 Residential, and 1.2 Non- Residential	Incomplete	Volume of construction works performed by: type/function of buildings (type of construction), ownership (public VS. private) sector and Region	National, Regional	1 year	1 year	CSA, Regions, sectors	
2	Building materials demand	Partially Available	Floor, Wall, Roofing, Sanitary & Electrical Materials.	National, Regional	1 year	1 year	CSA, Regions, sectors	
3	Civil works by type of construction	Unavailable	Dams, Roads, Irrigation, Land Devt, etc.	National, Regional	1 year	1 year	CSA /Sectors	

10.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Gap		
4	Contractors							
	4.1 Number of Contractors by grade and type	Not updated	Grade, Number, General and Building contractors.	National, Regional	1 year	2 years	MOIF/CSA	
	4.2 Work (volume) done by contractors	Not Available	No and volume of projects, Type/function of building.	National, Regional	1 year	2 years	MOIF/CSA	
5	Craftsmen (informal sector) by type of profession	Not Available	Carpenter, Mason, Plumber, Electrician, etc.	National Regional	1 Year	2 Years	CSA/MOIF	
6	Design							
	6.1 Consulting Offices	Not Available	Grade/category, No. of permanent professionals.	National, Regional	1 Year	2 Years	MOIF/ CSA	
	6.2 Value & No of Design Works	Not Available	Type/function of building.	National, Regional	1 Year	2 Years	MOIF/ CSA	
	6.3 Final & Provisional Acceptances	Not Available	By value and No.	National Regional	1 Year	2 Years	MOIF/ CSA	

10.4: (Cont'd)

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Gap		
7	Resource inputs							
	7.1 Material	Not Available	Type & volume of material	National, Regional	1 Year	2 Years	MOIF/ CSA	
	7.2 Equipment	Not Available	Type and Condition of Equipment.	National, Regional	1 Year	2 Years	MOIF/ CSA	
	7.3 Labor	Not Available	Type of Educational Level, No. and wages.	National Regional	1 Year	2 Years	MOIF/ CSA	
8	unit cost	Not Available	Building Cost Per m^2 by function of building	National, Regional	1 Year	2 Years	MOIF/CSA	
9	Major building materials cost	Partially Available	By type of material	National Regional	"	"	CSA	
10	Equipment and machinery rental value	Not Available	By type of equipment	National, Regional	"	"	MOIF/ELA	

10.4: (Cont'd)

Sub Sector: **Housing & Urban Development**

No	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Gap		
1	Housing production (urban)	Unavailable	No, cost, type, ownership.	National, Regional & town	Yearly	1 year	MUNIC. & MOIF/CSA	
2	Housing demand & supply	Unavailable	Number	National, Regional & town	Yearly	1 year	Municipalities, MOIF	
3	Physical & social infrastructures	Unavailable	No, cost, type.	National, Regional & town	Yearly	1 year	Municipalities, MOIF	
4	Building permits	Unavailable	No. cost, type ownership	National, Regional & town	Yearly	1 year	Municipalities, Regional & CSA	
5	Housing loans	Unavailable	No. cost, type ownership.	National, Regional & town	Yearly	1 year	CBB, Private Banks	
6	Towns with municipal status	Unavailable	Name, no.	National, Regional & town	Yearly	1 year	MOIF, Regions	
7	Rural housing production	Unavailable	No. cost.	National, Regional & town	3 years	3 years	CSA & Regions	

10.5: Medium Term Program Matrix - Construction Sector

No	Statistical Program	Problem of The Information	Cause of The Problem	Objective of The Program	Program Strategy	Expected Output	Major Activities	Focal Institutions	Remark
1	Contract constriction	Partially available	No comprehensive and regular survey	To provide a comprehensive and up to date information on all sub-sectors performed in this area	Create awareness on the data need and build capacity to conduct survey	A comprehensive data by sub-sector (annually by region)	Review the existing data collection and dissemination system, introduce a sustainable and standard survey programmes	CSA/ MOIF/RB	
2	Own - account construction	Incomplete and not up to date	No comprehensive and regular survey	To provide a comprehensive and up to date information on all sub-sectors performed in this area	Create awareness on the data need and enhance capacity to conduct survey	A comprehensive data by sub-sector (every three years by region)	Review the existing data collection and dissemination system, introduce a sustainable and standard survey programmes	CSA/ MOIF/RB	
3	Compilation of building Permits	Incomplete	No proper recording system and flow of information	To have Up-to-date supplementary information on building construction activities	Create awareness on the data need	Supplementary information on number floor area type and ownership of building annually by major towns, introduce a sustainable and standard reporting system		CSA/ RIFBs	

11. TRANSPORT AND COMMUNICATIONS SECTOR STATISTICS

11.1 Review of Statistical Data Requirements

In the road transport sub-sector the data required are yearly freight movements by commodity type, average number of working days by type, capacity and type of roads; average capacity utilization; empty running in major routes by type and capacity; total number of passengers transported yearly; total fleet size; operational fleet size by type, operational cost and the like. Regarding the rail transport, there is a reliable data source where one count on the availability to the desired extent. The major data items required are passenger traffic summary (domestic and international) that reveal number of passengers (in thousands), passenger km. in millions, average trip length, total traffic; freight traffic summary (domestic and international) including dry and liquid cargoes (in thousand tons), ton km. in millions, commodity summary by group; number of power units in terms of shunting locomotives, road locomotives & auto rails; car summary showing freight wagons, passenger coaches, rail car trailers, and service wagons and others.

With regard to air transport, the Ethiopian Airlines has had a strong database which can be issued in the required form and in the desired level. The limited problem to be cited here is the extent of circulation of its publications. Major data items of the sub sector needed are load and traffic production by type of equipment and division, operating statistics by type of equipment and division, comparative traffic statistics by type of flight and equipment schedule, regional statistics by type of flight and charter, ton kilometers analysis and others.

Regarding water transport, the Ethiopian Shipping Lines is managing the necessary statistical information reliably while the interland water transport though its services are bound to few lakes & seasonal rivers, the required information are not available altogether at national level. The major data needs of the sub-sector are international standing service disaggregated into export cargo through the directions of North West Europe, Mediterranean & Far East by own and chartered ships in ton; import cargo by own & chartered ships; number and type of ships by age, year of service, horse power and capacity and others.

With respect to transit and forwarding services, the emerging private sector is sharing the market with the Marine and Transit Service Enterprise (MTSE). Though this is the prevailing fact, data regarding activities of private transitors are hardly possible to trace. Besides, the major data requirement of the sub sector are number, capital and location of private transitors with their area of operation, transit

service in dry cargo through their port of entrance and outgoing; MTSE's transit service for dry cargo of foreign trade segmented into import & export cargoes through different branch offices & airports in tons.

Communications services are partitioned into postal & telecommunications which the necessary data are available as required. In postal service, the data required are service stations by administrative regions, number of P.O. Boxes by administrative regions, postal traffic by type of origin and destination, personnel & finance information. Regarding telecommunications, public network and public installations (national) disaggregated into public telecommunications stations, number of public stations by ETC region; public telephones (coin box telephone) by city/town; utilization of digital exchanges; utilization of automatic exchanges by region, etc. traffic in terms of outgoing, international telephone traffic; automatic telephones; metered calls and calls by telephone city/town; interurban telephone calls (via operator) by region, etc. are sought.

11.2 Assessment of the Existing Statistical Data

Road transport in Ethiopia has rapidly moved from being one of the most centrally controlled and hence documented transport sectors to one of partial completion, ambiguous regulation and virtual absence of statistics. Changes in personnel and the impact of deregulation would have resulted in some transitional adjustment problems for RTA, but these problems have been exacerbated by the rather imprecise devolution of many of its operational powers to Regional Transport Bureaus (RTBs) (World Bank Report, 1996).

It has completely altered from a situation of obtaining the most detailed operating statistics for both freight and passenger transport to a kind that is no longer possible to obtain an accurate estimate of the licensed vehicle fleet and the like. Data collected by the RTBs are partly forwarded to Road Transport Authority (RTA) and is not possible for compilation of national statistics.

As part of the reform program, commercial trucking has been deregulated since January 1, 1993 by the Council of Ministers Regulation to provide for the deregulation of the public commercial freight transport operation in May 1992 (Proclamation No. 14/1992). This measure resulted in the closure of zonal transport offices, freight rates ceased to be fixed by government authorities and private operators were no longer required to report to government agencies for their route and cargo assignment. It is veritable that deregulation conducted by turns. Thus, in October 5, 1994 tariff for mid buses deregulated and consequently official control remains only for the movement of bulk fuels, for passenger fares on maxi buses and

for urban transport. Besides, in pursuant of the aforementioned promulgation, it permits individuals to operate either as associates of government enterprises as they used to be; establish own companies, or organize themselves into independent associations. As a result many of private freight and passenger operators left the government parastatals (FTC and PTC) and formed their own independent associations. These associations are entitled to assign cargoes, select routes, collect commissions and yet do not have even fledgling recording system revealing their activities that heavily attenuates the statistical information of the sub sector.

On top of this, it has now been impossible to know the movement of freight, passenger and assigned fleet size for there are non licensed operators working the sector with severe consequence if measure is not taken. These contraband transporters comprise vehicles of private commercial organizations, NGOs, and government development organizations. Drivers of these organizations don't incur cost on themselves. As a result, they undercut the prevailing tariff in the market which heavily shaken legal transports who bear income taxes and operational costs. Not only these, but also it leaves no trace of loaded and unloaded freight, passengers transported, operational costs and many other statistical items which turned out to be potential danger on both sides.

There is also an important issue to be mentioned here. By now some Regional Development Associations are involving themselves in the industry without officially being admitted to do so as required by the law. This activity equally harm the flow of statistical information since Regional Transport Bureaus are not having the authority to ask them provide the information required.

The non-availability of dry cargo terminals and sufficient maxi and mini bus terminals opens a wide avenue to pick and drop freight and passengers by the road side, garages and fuel stations. Apart from the inconvenience emanated thereof to the passers by, garage workers and others, it also lessens the chance of success to obtain information regarding services they render.

In a nut shell, though there are some data items that could be traced from the RTA regarding the road transport sub-sector, they are not complete and in the required form. This is attributed to the form factors stated above. As a result, data regarding the sub-sector are altogether considered as "gap" and presented in the gap matrix.

11.3 Identification of Statistical Data Gaps

The following matrix identifies the sector's data gap and suggest the preferable users interms of timelines, coverage and level of disaggregation. The data gap matrix is followed by a statistical program matrix.

11.4: Statistical Data Gap Matrix– Transport and Communications Sector

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
1	**Public Commercial Road Transport**							
1.1	Yearly freight movement among regions	Not available	By commodity type	National	Annually	3 months	CSA/RTBs/ RTA	
1.2	Average number of working days	Not available	By type, capacity, age, and ownership	National, Regional	Annually	2 months	CSA, RTBs	
1.3	Average freight/passenger rates	Not available	By type, capacity and type of roads	National, Regional	Annually	3 months	RTA/CSA, RTBs	
1.4	Average capacity utilization	Partially available	By type	National, Regional	Biannually	3 months	RTA/CSA, RTBs	
1.5	Yearly in bound and outbound journeys in Addis Ababa - Djibouti - Assab corridor and the total freight transported	Not available	By capacity, and type	National	Annually	3 months	RTA/CSA/ RTBs	
1.6	Supplementary service facility	Not available	By standard and type	National, Regional	Annually	3 months	Regional Bureau/CSA	
1.7	Empty running in major routes	Not available	By type and capacity	National, Regional	Annually	2 months	Regional Bureau/CSA	
1.8	Regional distribution of vehicles	Not available	By capacity and age	National, Regional	Annually	3 months	CSA/RTA, RTBs	
1.9	Total fleet size in the country	Partially available	By type, capacity and age	National, Regional	Annually	3 months	RTA/CSA, RTBs	
1.10	Operational fleet size	Partially available	By type	National, Regional	Annually	3 months	RTA/CSA/ RTBs	

11.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form and Frequency				Focal Institution	Remark
			Level of Disaggregation	Level of Reporting	Frequency	Tolerable Lag		
1.11	Average journey time on selected routes	Not available	By type, capacity and age	National, Regional	Annually	3 months	CSA/RTA, RTBs	
1.12	Total service rendered by passenger and freight vehicles in ton km and in passenger km	Partially available	By capacity, age and ownership	National, Region	Annually	3 months	RTA/CSA, RTBs	
1.13	Total number of taxis	Partially available	By capacity and age	National, region	Annually	3 months	CSA/RTA, RTBs	
1.14	Total number of operational taxis	Partially available	By capacity and age	National, region	Annually	3 months	RTA/CSA, RTBs	
1.15	Operational cost of vehicles	Not available	By capacity and age	National, region	Annually	3 months	CSA/RTA, RTBs	
1.16	Average down time of taxis per year ...	Not available	By type, capacity and are	National, region	Annually	3 months	CSA/RTBs	
1.17	Taxi fares	Not available	By capacity and regions	National, region	Annually	2 months	CSA/RTBs	
1.18	Average daily/yearly distance traveled	Not available	By capacity and age	National, region	Annually	2 months	CSA/RTBs	
1.19	Number of private transistors and forwarders	Not available	By amount of investment, area of operation, ton forwarded, location	National, region	Annually	3 months	Customs /RTBs/CSA	
1.20	Number of storages available in the country	Not available	By location and capacity	National, region	Annually	3 months	CSA/RTBs	
1.21	Number of pack animals (equines) wheel barrows, carts, etc.	Not available	By location , type and service give in quintals	National, region	Annually	3 months	CSA/RTBs	

11.5: Medium Term Statistical Program Matrix - Transport and Communications Sector

No.	Statistical Program	Problems of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	Survey of Road Transport (Passenger and freight)	Not up to date and comprehensive	– Lack of inter-organizational information flow, unclear accountability and extent of authority – Organizations are not realizing the responsibility to provide data to users as required	Generate comprehensive data that would help to monitor the development of the sector and estimate the sectors' value added.	Establish formal access to regional bureau, private associations, government transports and non licensed operators	Up to date sector value added and analytical reports (annual survey)	Design questioner, collect analyze, and interpret data	CSA/RTA/ RTBs	Survey/Adm. Record
2	Survey of Traditional and Intermediate transport	Problem of timeliness, i.e. attempted studies are all outdated	Not given due attention	Determine the extent of use of traditional and intermediate means of transport	Establish complete directory of operators to understand surveys	Determine transport need and potential for the rural population (Annual survey)	Design questionnaires collect analyze, and interpret data	CSA	Survey
3	Compilation of Air, Rail and Water Transport, and Transit service	Inconsistency	Organizations are not realizing the responsibility to provide data to users as required	Determine passenger and freight flows for all modes of transport	Strengthen MOT & COM so that a comprehensive data base would be established	Determine passenger and freight share of the total passenger and freight movement and their economic contribution	Collect process, analyze and disseminate data	MOT & COM/CSA	Survey/Adm. Record

11.5: (Cont'd)

No.	Statistical Program	Problems of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
4	Compilation of Communications statistics (Telecommunications and Postal Services)	Lack of timeliness and regularity	– Lack of in-build mechanism for the flow of information to users – Organizations are not realizing the responsibility to provide data to users as required	To improve the effectiveness of sector planning.	Make necessary compilations from the respective organizations	Establish sustainable data flow from enterprises to MoT & COM	Create awareness among data generators/ producers about the importance of their data for planning and program formulation	MoT & COM/CSA	Survey/Adm. Record

12. SOCIAL "SECTOR" STATISTICS

The social "sector" mainly comprised of education, health, labor and social affairs and media, culture and sports, housing, law and order. In this document an attempt is made to address statistical issues of all sectors except law and order and housing.

About 60 percent of social sector information is generated from administrative records. Educational Management and Information system of the Ministry of Education (MoE), Health Statistics Division of the Ministry of Health (MoH), Planning and Programming Department of the Ministry of Information, Ministry of Youth, Sport and Culture; and Labor Department of the Ministry of Labor and Social Affairs (MoLSA) are the main statistical units responsible for collection, compilation and dissemination of statistical data pertaining to the activities of the respective ministries at the federal level.

12.1 Review of Statistical Data Requirements

12.1.1 Education

In general, statistical data on education and literacy serve the following purposes: for designing sector development strategy and program, and to determine the pattern of resource allocation within the sector. Moreover, data dissaggregated by region, sex etc. help to understand disparities in access to education services. In addition, information on the available facilities manpower and other inputs help to gauge the quality of services.

Education statistics basically should show the levels and relative changes of the following variables:

- Educational attainment
  - By region
  - By level of education
  - By literacy rate, sex and age.
- Enrollments (both public and private schools)
  - Primary and secondary schools by age, sex and region
  - Higher education by sex, age, sub-sectors chosen and region.

- Drop-outs and repetition (re-admission) (both private and public schools)
  - Primary and secondary schools by age, sex, grade and region.
  - Higher educational institutions by age, sex, field of study and region.

- Successful completion and graduates (public and private schools)
  - Primary and secondary schools by age, sex and region.
  - Higher education institutions by age, sex, field of study and region.

- Adult education (mostly public)
  - Study groups and evening classes
  - Distance education and correspondence courses
  - Farm school
  - Statistical data in this area relevant to the Ethiopian circumstances

- Data on the distribution of educational materials (mostly books)
  - Primary education
  - Secondary education
  - Technical and vocational education
  - Higher education institutions

- Teachers (both public and private schools)
  - Primary and secondary schools by educational attainment (level), age and sex
  - Higher education institutions by level of educational attainment, sex and age
  - Adult education by level of educational attainment, sex and age

- Educational expenditure (both public and private schools)
  - For primary and secondary education
  - For higher education
  - For adult education

by funding source: Ministries, Municipalities, private bodies, parents.

12.1.2 Health

Availability of robust information on health and related area serve the following major purposes. First, for analyzing the prevalence of illness, health problems, second, to monitor the progress being made towards the goals and targets of health services coverage at national as well as regional level, third, it helps to understand the impact of the available health services on health status of the population. In addition, it indicates where resources are required, and the current pattern of allocation.

In general, the required health sector statistics should show the level and changes of the following variables:

- Major health problems
  - Nutritional status of women and children,
  - Nutritional status of persons by sex, age, region/district,
  - Prevalence and spatial distribution of diseases, and,
  - Availability of drinking water and sanitary condition by household, region, etc.

- Population health status
  - Morbidity rate by sex, age, region,
  - Incidence of illness by sex, age, region,
  - Functional disabilities by sex, age, region,
  - Major causes of death, and
  - Types of disabilities.

- In and out-patients in hospitals, clinics,
  - By sex,
  - By age,
  - By major cause of morbidity & mortality (disease groups) and
  - By region.

- Maternal and child care
  - Reported nº of deliveries in the health facility by region,
  - Reported nº of immunized children by type of vaccine, region, and sex.
  - Visits to maternity hospitals (in-patients/out-patients) by regions,
  - Health Facilities.

- Reported infectious diseases
  - From out-patients care by sex, age, region, and
  - From in-patients care by sex, age, region.

- Successful deliveries, treatment and operations
  - In maternity hospitals, clinics, and
  - In other hospitals.

- Birth control facilities
  - Contraceptive prevalence rate, and
  - Coverage of birth control activities in rural and urban areas.

- Health personnel (public and private) by region
  - Hospitals by personnel group and region,
  - Clinics by personnel group and region,
  - Health centers by personnel group and region, and
  - Trained personnel by year of graduation

- Health care (capacity) facility
  - Hospitals, health centers, clinics and other medical institutions by region,
  - Hospital beds by region, and
  - Bed capacity by region.

- Expenditure on Health Care (capital versus recurrent) by region
  - Administration,
  - For medical care services,
  - For preventive services, and
  - For research and development (R & D).

- Number and spatial distributions and activities of registered traditional healers
  - Number by sex, age and region,
  - Estimated average annual income, and
  - profile of illnesses being cured by them.
  - Number of users by sex, age and region,

12.1.3 Labor and Social Affairs

Comprehensive, standardized and timely labor and social affairs statistics at the appropriate levels of disaggregation and reporting is essential for planning, policy

formulation and monitoring of the sector's activities at national level. Unemployment is one of the fundamental macroeconomic problems that has challenged modern nations for a fairly long period of time. Tackling root causes of the problems of unemployment requires the availability of basic data on the magnitude and structure of unemployment among the population.

In addition, statistics showing the levels and changes in social sector variables like pensioners by sex age and region; the number of elderly and the number of elderly being served; children's homes by age and sex of children; general social work to communities by type of work; the number and spatial distribution of the disabled and mentally and physically handicapped by regional major towns are essential to devise programs by government and private operators to alleviate these social problems. Trends in the number and profile of target groups (vulnerable groups) by major towns and urban centers is an essential information to monitor the extent of urban poverty in the country.

Statistics on the size and distribution of street children and profile of organizations engaged in schemes targeted to tackle street children is also essential for planning purposes at national level so as to avoid duplication of efforts and wastage of resources.

The following are the data items essential to describe the activities of the labor and social affairs sector.

Statistics on labor and social affairs should show the level and changes of the following variables:

- Labor force (urban and rural)
  - Employed labor force private and public by age, sex, region, and economic activities
  - unemployed labor force by age, sex and region
  - Extent of underemployment in urban areas and rural areas

- Registered job-seekers (trends) by level of education, age and sex
  - Drop-outs, 12th grade complete by sex and age
  - Certificates
  - Technical school graduates
  - Diploma
  - First degree and above

- Pensioners
  - Number of pensioners by sex, age and region
  - Annual pension payments
  - Profile of pensioners by educational background or area of service (civil versus military)

- Disability
  - Number of the disabled persons by sex, age and region
  - Causes of disability by sex, age and region

- The number of children being served
  - Spatial distribution
  - Number of children

- Number of indigenous and foreign NGOs involved in various children support programs
  - Indigenous by region
  - NGOs by region

- Elderly
  - Number and distribution by region
  - Supporting agency

- Number and spatial distribution of street children support programs
  - Numbers of organization
  - Children's being supported

- Expenditure on social support programs
  - Through government bodies (at both levels)
  - Through private operators (indigenous versus NGOs)

12.1.4 Media, Culture and Sports

Almost all data pertaining to media, culture and sports are supposed to be administratively generated (supplied). One of the means to obtain information on current affairs information could be through the media: Radio, Television, the Press (both private and public), the Internet and other means of communications. Data describing the activities of different means of disseminating information are essential to devise methods for adopting information technologies of the time.

Data on the profile of users of the different ways of disseminating current affairs through media of having basic "information", of course, are of paramount importance for planning and policy formulation in the area. Statistics describing the elasticities of demand for the different ways of transmitting "information" could be a useful guide to planning an effective way of disseminating information.

With regard to culture, Ethiopia's cultural heritage although immense and rich in diversity has never been systematically identified, registered and maintained. Hence, data on the type and spatial distributions of cultural heritages both registered and unregistered are of special significance to devise ways and means of maintaining, documenting and transferring them to the coming generation.

Statistical data on sports activities should basically provide an adequate statistical basis for planning the development of this activity. It has been a long time since sport has become a very important forum for the world to come to know each other. Sport activities, among others, include: athletics, football, volleyball, basketball, boxing, gymnasiums, acrobatics, car racing, hockey, tennis, etc. Statistics on the number of sports personnel, clubs, persons practicing the different types of sporting activities, designated fields for sporting activities (stadiums, etc.) play grounds, government and private expenditure for the promotion of sports are among the essential information for planning the development of sports activities in the country.

The above broadly outlined data items constitute the domain of data needs that ought to be supplied at both the national and regional levels to monitor the activities of the sector and for planning, policy formulation and socio-economic analysis. There are gaps in most of the above data categories which could be explained in terms of either lack of comprehensiveness, timelines, consistency or non-availability. The data gaps in terms of the above data problems are presented in the accompanying statistical data gap matrices. Corresponding umbrella programs are also formulated to close the gaps.

12.2 Assessment of the Existing Statistical Data

12.2.1 Education

This sub-sector is supposed to cover the activities of all governments, private, mission and community educational institutions of all types: primary schools, junior secondary schools, comprehensive secondary schools, Teacher Training Institutions; Technical Vocational and Commercial schools and Universities and Colleges. Special (deaf and blind) schools, Kindergartens, Night and Continuing Educational Institutions that do follow the curricula of the Ministry of Education

(MoE) are also included in the sub-sector. Adult education is also within the same domain. Apart from this, information on literacy rates and grades completed, which are obtained through primary data collection system are also part of educational statistics.

Currently the MoE and its counterpart Regional Education Bureaus are the major sources of education statistics within their respective jurisdictions. The flow of education sector statistics between Regions and the Federal MoE currently seems to be at best informal and at worse non-existent. The bulk of education statistics being managed by regions, their complementary role in the establishment of national education sector data base seems to be crucial.

With regard to public education institutions at all levels, comprehensive and consistent data on number of students, teachers and number of schools by type and by region is not made available in a timely manner at national level. The main reason for lack of comprehensiveness, timeliness as well as consistency could be the non-existence of in-built formal mechanisms for the flow of education statistics from regions to the federal MoE. Data on the number of students attending public night schools and continuing education at higher education institutions is not also made available regularly.

As to private schools, no mechanism has yet been established for smooth and uninterrupted flow of data that reflect its performance in terms of enrollment, number of students, number of teachers and their regional distribution. The availability of requisite data on these variables is of paramount importance for planning and policy formulation in the education sector at national level. Comprehensive data on the number of registered kindergartens and their corresponding annual intake is not also made available at national level. Annual data on the number of special schools (including newly established ones) should also be compiled and disseminated to users.

Another important component of statistical data that is being made available on a regular basis, with a time lag of two to three years is data on government expenditure on education at both the federal and regional levels. This consists of both recurrent and capital expenditure. However, data on revenue from public night schools and continuing education have not been made available through the MoF's annual accounts or other sources. This has become a considerable hindrance in the computation of GDP from education services.

As to the private sector, data on expenditure (both recurrent and capital) and revenue proceeds are not being made available through appropriate government

institutions (MoE and the MoF) to users. Private sector participation being a new development in the country, regular and timely flow of data on the activities of the private sector is crucial to evaluate its performance over time. The Ministry of Education with the collaboration of Regional Education Bureaus is responsible for a coordinated and uninterrupted flow of education statistics at national level. Lack of revenue and expenditure data on private Education services has also greatly constrained GDP compilation both from the supply side and the expenditure side. The capital expenditure component of the sub-sector's overall expenditure is a component of private sector fixed investment.

In the case of education statistics generated through government bodies (federal as well as regional levels), the problem with the existing data could be that of lack of in-built mechanisms for proper flow of information from compilers to users at national level. Creation of a forum for user-producer interaction and establishment of systems for uninterrupted flow of information would help to bridge the data gap problem currently being encountered. A concerted effort needs to be made by pertinent government organizations at both the Federal and Regional levels so as to redress the prevailing data gap problems for the private education services.

12.2.2 Health

At Federal level, the Ministry of Health (MoH) is responsible for compilation and dissemination of health statistics generated as a result of the activities of health service rendering institutions. The Regional Health Bureaus are responsible for health services activities carried out by Regional health service rendering institutions: clinics, health centers, hospitals and community health services rendering units. They are also supposed to be responsible for the compilation and dissemination of statistical data describing the activities of public health service rendering institutions. The federal MoH is in principle responsible for compilation and dissemination of all types of comprehensive and well disaggregated health statistics for use at national level. It is expected to encompass comprehensive and timely health statistics that describe the activities of private health service rendering organizations (Hospitals, Health centers, clinics etc.). Statistics on the number, regional distribution and average income earned of private registered traditional healers need be incorporated in the annual Health Statistics Reports of the federal MoH.

In general, the existing health sector statistics are characterized by lack of comprehensiveness, timeliness and authenticity. These problems are largely attributable to the prevailing very loose and informal information exchange systems between the federal MoH and Regional Health Bureaus. Most of the health sector activities being concentrated in the Regions, formal information exchange between

regions and the MoH is of paramount importance for the establishment of a national data bank for health sector statistics.

As it stands now, the major sources of health statistics at national level is the MoH's Annual Health Statistics Reports. However, the coverage of these reports seem to be limited to the activities of government health service rendering institutions at both the Federal and Regional levels. This by itself may not be comprehensive and timely to be of use for planning and policy formulation exercises at national level. The most serious omission, however, is statistics describing the activities of private health service rendering institutions. There is no established mechanisms for obtaining private health sector statistics for use at national level.

Although, rather fragmented and patchy and sometimes inconsistent, statistics on the number of hospitals, health centers, clinics, number of medical personnel, ancillary/supporting staff and their regional distribution are being made available for public health service rendering institutions. The main problem of data generated through public health service rendering institutions is lack of timeliness, comprehensiveness and consistency. Data may not also be reported as required interms of levels of reporting and disaggregation.

Annual health statistics on the expenditure of government-run health service giving institutions are being made available on MoF's annual budget reports. Regional Health Bureaus also generate corresponding data for use at regional level. The main problem with this statistics is lack of timeliness as it is being reported with a lag of atmost three years as in the case of education sector expenditure data. Revenue proceeds of privately owned health service rendering organizations could not be obtained from any of the recognized sources (MoH or MoF) at national level.

12.2.3 Labor and Social Affairs

As it stands now; the labor Department of the Federal MOLSA provides fragmented bits and pieces of information on the activities of the sector. The MOLSA provides data on registered job-seekers at national level. This data even is not likely to be comprehensive (may not have national scope) as regional data may not be uniformly incorporated in MOLSA's reports. As a result, data on unemployment currently being quoted are rather fragmented, inconsistent and are of limited scope and coverage. Hence, there has not been a nationally established standardized figure on the rate of unemployment.

There has not been in-built mechanisms for the flow of comprehensive and standardized data on the size and structure of employment and unemployment statistics for the private and public sectors. Except the recent one time survey result

on urban informal sector by the CSA (1995/96), no statistics has been made available through official source on informal sector employment. The Small Scale Handicrafts and Cottage Industries Survey of the CSA (only a snap shot one time survey - 1996/97) also provided some information on informal sector employment.

Statistics on the size and spatial distribution of street children and the operations of indigenous and foreign benevolent organizations residing in Ethiopia has not been regularly made available to users at national level through one recognized channel, say, the MOLSA. The MOLSA is supposed to compile, aggregate and issue the requisite data via its annual statistical publications for users at national level. Comprehensive time-series data on the disabled and the handicapped are not currently available from recognized sources (MOLSA or CSA) except some sporadic results from the population censuses of 1984 and 1994.

12.2.4 Media, Culture and Sports

The statistics on the sector is supposed to describe the activities of Theaters, Museums, the Media, Cultural Heritage, Arts and Literature, Documentation and Library, Film Corporations, Language Translation Services, Micro Films, Entertainments and Amusements, and Sports.

These have not been system for which will ensure uninterrupted flow of information from these sources to users at national level. The statistics are largely generated from administrative records.

It is high time that a national data bank be established at national level so that users could easily obtain basic data from one recognized source. The Ministry of Information (MOI) seems to be well placed to play such a role. It is supposed to furnish requisite data that describe all conceivable activities of the sector. Currently available statistics describing the activities of this sector in general are characterized by lack of comprehensiveness, timeliness and consistency. Apart from this, the data are not user-oriented. Mechanisms need to be devised for a systematic and user-focused dissemination of the statistics describing the activities of the sector.

12.3 Identification of Statistical Data Gaps

The discussions made in the above sections have helped to identify the data gaps in each of the social sub-sectors. These data gaps are indicated in the following matrix followed by a medium-term program matrix.

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
	B. Teacher and Student Population							
1	Number of Teachers in kindergarten, primary, junior secondary, high school, STCs, and TTIs	Not in the required form	Sex/ age qualification/ salary scale/ year services and rank	Regional	Annually	One year from October	MOE/REBs/ CSA	
2	Total student population per school (at all levels)	The latest data is for 2000/2001	Age, sex and grade level	Regional	Annually	One year beginning from October	MOE/REBs/ CSA	
3	Enrollment: Kindergarten, Primary, high school, STCs, TTIs	The latest data is for 2000/2001	Age and sex grade level	Regional	Annually	One year beginning from October	MOE/REBs/ CSA	
4	Drop- outs ,and Repeaters Kindergarten, Primary, high school, STCs, TTIs	Not in the required form	By school, grade level age and sex	Regional	Annually	One year beginning from October	MOE/REBs/ CSA	Because that existence of age-helping not frequent
5	Successfully completed students Kindergarten, Primary, high school, STCs, TTIs	The latest data is for 2000/2001	By school, grade level age and sex	Regional	Annually	One year beginning from October	MOE/REBs/ CSA	

12.4: Statistical Data GAP Matrix -Social Sector

12.4.1 Sub-Sector: *Education*

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
I	**General Education**							
	A. Educational Facilities							
1	Number of Kindergartens	The latest data for 2000/2001	School type/UIR Region/Zone	Regional	Annually	One year/ beginning from October	MOE/ REBs	Individual/ private community level
2	Number of primary schools (1-8)	"	"	Regional	Annually	One year/ beginning from October	MOE/ REBs/ CSA	
3	Number of high schools	The latest available is for 2000/2001	"	Regional	Annually	One year/ beginning from October	MOE/ REBs/ CSA	
4	Number skill development training centers - special	"	"	Regional	Annually	One year/ beginning from October	MOE/ REBs/ CSA/ MOLSA	
5	List of Teachers' Training Institutes (TTIs)	"		Regional	Annually	One year from October	MOE/ REBs/ CSA	
6	Number of sections, class rooms, and average student holding size	The latest data is for 1996/97	Grade and level of education	Regional	Annually	One year from October	MOE/ REBs/ CSA	
7	Number and capacity of Labs, Workshops, library, media, health ,sport and recreation facilities	The latest data is for 2000/2001	Type and level of education	Regional	Annually	One year from October	MOE/ REBs/ CSA	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
II	**Adult Education**							
1	Number of schools providing extension	The latest data is for 1995/1996	By level and ownership	Regional	Annually	One year	MOE/REBs	
2	Number and type of distance education and correspondent learning	Not updated the latest data are of 1998/99	Area of study	Regional	Annually	One year	MOE/REBs	
3	Other training and retraining program	Not updated the latest data are of 1998/99	Level	Regional	Annually	One year	MOE/REBs	
4	Total population attending adult education and enrollment	Not updated the latest data are of 1998/99	Sex, age, level and specialization	National regional	Annually	One year	MOE/REBs/ CSA	
III	**Educational materials, budget and Investment**						MOE/REBs	
1	Number of public and Pvt. Institutions involved in the preparation of educational materials	Not available	Nationality (Ethiopian/ Expatriate)	National regional	Annually	One year	MOE/REBs	
2	Total inventory of text books	Not available	By level and subject	Institute, National	Annually	One year	MOE/REBs	
3	Total, recurrent and capital budget allocated per level of school	Not in the required form	Type (capital/ recurrent/ salary/ non-salary)	Regional	Annually	One year	MOE/REBs	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
4	Number of schools with audio visual facilities	Not in the required form	By level of school, ownership and program	Regional	Annually	One year	MOE/REBs	
5	Amount of new private investment: licensed, under implementation and started operation	Not compiled	Type and level of school	Regional	Annually	One year	MOE/REBs	
IV	**Higher Education**						MOE/REBs	
1	Number and capacity of higher education institutions	Not in the required from	By type, level and specialization	Regional	Annually	One year	MOE/REBs	
2	Total student population and enrollment	The latest data is for 2000/2001	By institutions, specialization, level, sex and age	National regional zonal	Annually	One year	MOE/REBs/ CSA	
3	Total number of academic staff	The latest data is for 1998/2000	By nationality, qualification, specialization, experience, age and sex	National regional zonal	Annually	One year	MOE/REBs	
4	Drop- outs and Repeaters	Not available	By institution, specialization, level, sex and age	National regional zonal	Annually	One year	MOE/REBs	
5	Graduates	The latest data is for 2000/2001	Per institution, by specialization, level and sex	National, Regional, zonal	Annually	One year	MOE/REBs/ CSA	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
6	Number and capacity of labs, workshops, library, communication, health ,sport and recreation facilities	Not collected compiled	By type of institution	National, Regional	Annually	One year	MOE/REBs	
7	Total inventory of text books	Not compiled (not available)	By institution and subject	National, Regional	Annually	One year	MOE/REBs	
8	Total recurrent and capital budget allocated	Not compiled as required	By program/ type of school and institution	National, Regional	Annually	One year	MOE/MOF/ MOLSA	
9	Number and capacity of institutions providing evening program specializations	The latest data is for 2000/2001	By type of specialization	National, Regional	Annually	One year	MOE/REBs	
10	Total population of evening students	Not compiled	Type of school/ institution/ level attended, age, sex	National, Regional	Annually	One year	MOE/REBs/ CSA	
11	Academic dismissals, withdrawals and dropouts from regular and extension programs	The latest data is for 2000/2001	By sex/year of study and level	National, Regional	Annually	One year	MOE/REBs	
12	Graduates from extension program	Not up-to-date	Total number, per institution , specialization, level attained, age and sex.	National, regional	Annually	One year	MOE/REBs/ CSA	
13	Fees for evening classes – Rates per semester – Rates per credit hours	Not available	By institution , specialization, level of qualification	National, regional	Annually	One year	MOE/REBs	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
14	Total revenue and expenditure related to evening and extension programs	Not available	By institution	National, regional	Annually	One year	MOE/REBs	
15	Administrative and general service staff	The latest data is for 2000/2001	By level of education and sex	Regional	Yearly	One year	MOE/REB	
16	Ethiopian students sent abroad	The latest data is for 2000/2001	by level of education, specialization, age, sex and country of study	Regional	Yearly	One year	MOE/CSA	
17	Ethiopian graduate returnees from abroad	The latest data is for 2000/2001	By sex/country/ field of study and level of qualification (certification) age	Regional	Yearly	One year	MOE/CSA	

12.4: (Cont'd)

12.4.2: Sub-Sector: *Health*

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
1	Distribution of health facilities	The latest data is for 2000/2001	By type and ownership	National, Regional, Zonal	Annually	One year	MOH/RHB/ CSA	
2	Health facility population ratio	The latest data is for 2000/2001	By level (center/station/ hospital/bed)	National, Regional, Zonal	Annually	One year	MOH/RHB/ CSA	
3	Distribution of pharmacy, drug shops, and rural drug vendors	The latest data is for 2000/2001	By ownership, location in various forms	National, Regional,	Annually	One year	MOH/RHB/ CSA	
4	Health training schools and their enrollment capacity	The latest data is for 2000/2001	By capacity, location and field of study	National, Regional,	Annually	One year	MOH/RHB	
5	Number of traditional healers and midwives	The latest data is for 2000/2001	By income and expenditure	Regional	Annually	One year	RHB/CSA/ MOH	They are coming to the system
6	Private health services registered, none registered	The latest data is for 2000/2001	By type, level, location	Regional	Annually	One year	MOH/CSA/ RHB	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
7	Number, type and distribution of health personnel	The latest data is for 2000/2001	By scope of service and ownership	National, regional	Annually	One year	MOH, RHB	
8	Physician and nurses population ratio and nurse to physician ratio	The latest data is for 2000/2001	At least at zonal level	National, (UVR) regional, (UVR) zonal (UVR)	Annually	One year	MOH, RHBs/CSA	
9	Distribution and pattern of administrative staff	Not available	By sex, educational level	National, (UVR) regional, (UVR) zonal (UVR)	Annually	One year	MOH/ RHBs	
10	Clinical Activities	The latest data is for 2000/2001	By sex and age	National, regional, zonal,	Annually	One year	MOH/RHBs	
11	Outpatient morbidity	The latest data is for 2000/2001	By health facilities	National, regional, zonal,	Annually	One year	MOH/RHBs	
12	Admission and mortality level	The latest data is for 2000/2001	By health facilities	National, regional, zonal,	Annually	One year	MOH/RHBs	
13	Major and minor operations	Not available	By health facilities	National, regional, zonal,	Annually	One year	MOH/RHBs	
14	Diagnostic activities	The latest data is for 2000/2001	By type of diseases	National, regional, zonal,	Annually	One year	MOH/RHBs	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
15	Ten leading causes for morbidity, admission and hospital deaths	The latest data is for 2000/2001	By type and number	National regional	Annually	One year	MOH/RHBs	
16	Maternal and child health services	The latest data is for 2000/2001	By age, sex, weight	National regional zonal	Annually	One year	MOH/RHBs	
17	Child health services, immunization, under 5 clinical services, achieved and coverage	The latest data is for 2000/2001	By age, sex, weight	National regional zonal	Annually	One year	MOH/RHBs/ CSA	
18	Growth monitoring activities	The latest data is for 2000/2001	By weight, nutritional status	National regional zonal	Annually	One year	MOH/RHBs	
19	Maternal health services	The latest data is for 2000/2001	By type	National regional zonal	Annually	One year	MOH/ RHBs	
20	Antenatal service coverage	The latest data is for 2000/2001	By age, frequency and duration	National regional zonal	Annually	One year	MOH/RHBs	
21	TT2 coverage of pregnant women	The latest data is for 2000/2001	By number, duration, age	National regional zonal	Annually	One year	MOH/RHBs	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
22	Delivery services provided	The latest data is for 2000/2001	By number, age	National regional zonal	Annually	One year	MOH/RHBs	
23	Family Planning services provided.	Not in the required form	By number, age	National, (UVR) regional, (UVR) zonal (UVR)	Annually	One year	MOH/RHBs/ Family Planning	
24	Health education session	Not in the required form	By number and sex	National, regional	Annually	One year	MOH/RHBs Kebele	
25	Environmental health activity coverage	The latest data is for 2000/2001	By number of session and type	National, regional	Annually	One year	MOH/RHBs/EPA	Sanitation health ____ service, ____
26	Budget appropriation by the health sector	The latest data is for 2000/2001	By major expenditure category	National, regional	Annually	One year	MOH/MOF/ MFaED/ RHBs	
27	Nutritional status of children	Partially available	By sex	National regional	Annually	One year	MOH/RHBs	Survey was carried out in March -April, 1998
28	Incidence of disease	The latest data is for 2000/2001	By age, sex, type	National regional	Annually	One year	MOH/CSA	
29	Essential drugs	Not available	By type, number	National	Annually	One year	MOH	
30	Per capita availability of health service	Not available	By type of service	National Regional	Annually	One year	MOF/MOH	
31	Patent - production contact frequency)average time)	Not available	By sex, age, type of service	National Regional Zonal	annually	One year	MOH/RABs	

12.4: (Cont'd)

12.4.3 Sub-Sector: *Labor and Social Affairs*

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
1	Number of registered job-seekers	Not as required. The latest data is for 1999/2000	By skill level/ by level of education, age and sex	National, regional	Annually	One year	MOLSA/ RLSB	
2	Reported vacancies	Not as required. The latest data is for 2000/2001	By occupation/ type number and sex	National, regional	Annually	One year	MOLSA/ RLSB	
3	Number of placed job-seekers	Not complete. The latest data is for 2000/2001	Occupation/ type/age group/education and sex	National, regional	Annually	One year	MOLSA/CSA	
4	Employment of Ethiopians Abroad	Not updated the latest data are of 1997/98	By country/age and sex	National	Annually	One year	MOLSA/ MOFA	
5	Number of Ethiopians who submitted their work entrants for approval to work abroad	Not updated the latest data are of 1997/98	By country of employment/ sex/formal and informal sector	National	Annually	One year	MOLSA/ MOFA	
6	Number of Ethiopians permitted to work abroad	Not updated the latest data are of 1998/99	By age-group/salary/ education/durat ion of contract material status and	National	Annually	One year	MOLSA/ MOFA/CSA	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Lag		
7	Number of foreign nationals issued with new and renewed work permits	Not updated, the latest data are for 1998/99	By type of occupation/ country of origin/ acceptance/education/salary/age-group and sex	National	Annually	One year	MOLSA/ Immigration	
8	Number of registered trade unions	The latest data is for 2000/2001	By number and location	National regional	Annually	One year	MOLSA/ RLSB	
9	Number of trade union disputes and their results	The latest data is for 2000/2001	By type of cases	National regional	Annually	One year	MOLSA/MOJ/ RLSB	
10	New registered collective agreement	The latest data is for 1999/2000	By type of ownership	National regional	Annually	One year	MOLSA /RLSB	
11	Number of registered work accidents	The latest data is for 1997/1998	By industry type	National regional	Annually	One year	MOLSA/ RLSB	
12	Cause of work accidents	The latest data is for 1997/1998	By industry group	National regional	Annually	One year	MOLSA/CSA/ RLSB	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Gap		
14	Location and type of injury classified	Not as required	By industry	National regional	Annually	One year	MOLSA/MOH/RLSB/ RHBs	
15	Types and number of work accidents	Not as required 1997/98	By occupation/age group and industry	National regional	Annually	One year	MOLSA/ MOH/RLSB/ RHBs	
16	Number of leave days issued as a result of work accidents	Not as required. The latest data is for 1997/98	By type of industry, age group, sex	National regional	Annually	One year	MOLSA/ MOH/ RLSBs /RHBs	
17	Number of street children and orphanage	Not as required	By sex, age group occupation	National	Every 5 years	Two year	CSA/MOLSA	
18	Number of Disabled	Not as required	By sex, age group occupation	National regional	Every 10 years	Two years	CSA	
19	Number of prostitution	Not available	By location U/R	National regional	Every 5 years	Two years	HOLSA/CSA	
20	Number of beggars	Not available	By location U/R	National regional zonal	Every 5 years	Two years	HOLSA/CSA/ RBs	
21	Number of aged	Not available	By location U/R	National regional	Every 5 years	Two years	SSA/MOLSA/ CSA/RBs	
22	Number of pensioned persons and services delivered	Not available	Age/sex/salary/ services	National regional	Annually	One year	SSA/MOLSA/ CSA/RBs	Needs survey
23	Social Security Institution	Not available	By location U/R	National regional	Annually	One year	SSA	

12.4: (Cont'd)

12.4.4 Sub-Sector: *Media Culture and Sport*

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Gap		
	Cultural Heritage							
1	Arts, heritage and poster competition conducted per year	No gender segregation the latest data available are for 1998/99	By culture and nationalities	Regional, national	Annually	One year	MOI/MOYSC	
2	Number of registered ____ and _____ heritage	Not update, the latest available is for 1998/99	By type	Regional, national	Annually	One year	MOYSC	
3	Population coverage of education on cultural heritage.	Not updated, the latest available is for 1998/99	By museums	Regional, national	Annually	One year	MOYSC	
4	Number of visitors of National Museum	Not updated, the latest data are that of 1998/99	Sex and nationality	Regional, national	Annually	One year	MOYSC	
5	Number of heritage kept in National Museum	Not updated the latest data is for 1998/99	– By date of collection – By age	National	Annually	One year	MOYSC	Nationals and foreign
6	Income from the of National Museum from visitors through selling entrance ticket, postcard, magazine, traditional items	Not update; the latest data is for 1998/99	Gross-income, income tax, net income	National	One year	One year	MOYSC	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Gap		
	Documentation, Library, micro film production and Language Translation						MOI	
1	List of public libraries and the size of their collection	No gender segregation 1998/99	By type of material annual average size compiled	National regional	Annually	One year	MOE	
2	Bibliographies	Not update the latest data are that of 1998/99	Year and number	National regional	Annually	One year	MOI	-
3	Total number of translation works (books)	Not update the latest data are that of 1998/99	By language and year	National	Annually	One year	Language Academy	
4	Number of words incorporated in dictionaries (newly adopted words)	Not update the latest data are that of 1998/99	Subject area	National	Annually	One year	Language Academy	
5	Number of words translated in to professional vocabularies	Not update the latest data are that of 1998/99	Subject area	National	Annually	One year	Language Academy	
6	Collected and translated of poems and/or sayings (by number of collections)	Not update the latest data are that of 1998/99	Languages	National	Annually	One year	Language Academy	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Gap		
7	Number of translated traditional books	Not updated the latest data are that of 1998/99	By Languages	National	Annually	One year	Language Academy	
8	Number of literature transformed into microfilm	Not update the latest data are that of 1998/99	Year	National regional	Annually	One year	MOYSC	-
9	Number of readers of microfilm library	Not update the latest data are that of 1998/99	Year	National regional	Annually	One year	MOYSC	-
10	Number of films that undergo laboratory tests	Not update the latest data are that of 1998/99	-	National regional	Annually	One year	MOYSC	-
11	Number of registered "Brana" Books	Not update the latest data are that of 1998/99	Year and location	National regional	Bi-yearly	Two year	MOYSC	-

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Gap		
	Arts and sport							
1	List of full time theatrical works presented	Not uptodate, the latest data is 1998/99	By theater houses, by year, size of audiences and income generated	National regional	Annually	One year	MOYSC/RICBs	
2	List of music composed by singers	Not uptodate, the latest data is 1998/99	By type and number of cassettes, CDs produced	National regional	Annually	One year	MOYSC/RICBs	
3	Number of local bands	Not available	By number, musical instrument, location	National	Annually	One year	MOYSC/RICBs	-
4	Number of original Ethiopian music cassettes/CDS	Note available	year and original cassette	National	Annually	One year	MOYSC/RICBs	-
5	Number of musical programs organized	Not uptodate, the latest data is 1998/99	Year, type, size of audience and income	National regional	Annually	One year	MOYSC/RICBs	
6	Number of short-time theaters presented	Not uptodate, the latest data is 1998/99	By theater houses, by year size of audiences and income generated	National regional	Annually	One year	MOYSC/RICBs	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Gap		
7	Number of short dramas displayed or aired on TV and radios respectively	Not up-to-dated, the latest data are that of 1998/99	Year, type	National regional	Annually	One year	MOI/MOYSC/ RICBs /T, R, M organized	
8	Enrollment and graduates from art schools	Not updated the latest data are that of 1998/99	Fields of specializing, school, and year	National regional	Annually	One year	MOYSC/MOE	Until How gets full authority MOYSC is approaching
9	Size of manpower in culture and sports sub-sectors	Not updated, the latest data are that of 1998/99	Sex/Year and type of employee	National regional	Annually	One year	MOYSC/ FSC/RSL	-
10	Recurrent and capital budget allocation and utilization for culture and sports activities	Not updated the latest data are that of 1998/99	Year	National regional	Annually	One year	MOYSC/ FSC/RSL	-
11	Number of registered sport clubs, Federation, Teams	Not update in the world firm	By type, and size of members	National, regional, zonal	Annually	One year	FSC/RSL/RS:	-
12	Revenue and expenditure of sport clubs	Not available	By clubs	National, regional	Annually	One year	"	-
13	Number of registered referees --------- ----- committee numbers	Not in the required firm	Sex/year	National, regional, woreda	Annually	One year	FSC/RSC/ZSC	
14	Expenditure in various sport activities	Not in the required firm	year	National, regional	Annually	One year	FSC/RSC	

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Gap		
15	Number of multi-purpose stadium, multi purpose ground, playing ground, stadiums gymnasium	Available but not as required	By capacity	National, regional, zonal	Annually	One year	FSC/RSC/ZC	Data will be needed to the extent of district
16	Demand and supply of sport wears, equipment and health facilities	Not available	By type	National, regional, zonal	Annually	One year	FSC/RSC/ZC	
17	Number of International and National level competitions – rascality – prize	Not available	By type/prize	National	Annually	One year	FSC/RSC/ZSC	
18	Size of manpower in apart sub-sector	Available but not as with required	By national federation regional sort bureau clubs	National	Annually	One year	FSC/RSC/ZSC	
19	Size of manpower in apart sub-sector	Available but not as with required form	Age/sex/qualification and	National	Annually	One year	FSC/RSC/ZSC	
20	Recurrent and capital budget allocation and utilization of sport activities	Available	Year	National	Annually	One year	FSC/RSC/ZSC	
21	Traditional sports	Available but not as with required form	By type	Regional zonal	Annually	One year	FSC/RSC/ZSC	

12.4: (Cont'd)

No.	Indicator/Data	Statistical Gap	Required Form & Frequency				Focal Institution	Remark
			Level of Disaggregation	Reporting Level	Frequency	Tolerable Gap		
13	Number of cinema halls and their capacity	Not update the latest data is 1998/99	By major towns and cities	National regional	Annually	One year	MOYSC/RICBs	-
14	List of documentary films produced	Not update the latest data are that of 1998/99	By year of production and title	National regional	Annually	One year	MOYSC	-
15	Number of films imported, distributed , attended, and income generated.	Not updated the latest data are that of 1998/99	Year, type and country of origin	National regional	Annually	One year	MOYSC	
16	Number of slide films designed	Not updated the latest data are that of 1998/99	By type, year	National	Annually	One year	MOYSC	
17	Number of young professional artists	Not updated the latest data are for 1998/99	Sex, age specialization	Regional, national	Annually	One year	MOYSC/RICBs	

12.5: Medium Term Program Matrix - Social Sector

12.5.1 Sub-Sector: *Health, Education, Welfare and Media*

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
1	**Health**								
1.1	Compilation of Health Sector Statistics – Public – Private – Traditional – Utilization of health service delivered	– Incomplete and not up to date. The regularly published health sector statistics lag by more than two years. In addition, some of the most important data such as nutritional status of children, incidence of disease, availability of essential drugs are missing	– Irregular mechanism of data collection, – Data flow from regional administrations and health institutions – Weak institutional capacity of data collection, processing and dissemination	To provide a comprehensive and timely information required for compiling parameters, designing sector strategy and policy, prepare SIP and monitor changes	– Develop and introduce a sustainable Health Sector Information System(HSIS) – Strengthen MOH data collection processing and analyzing capacity – Strengthen CSA data collection processing and analyzing capacity	– A comprehensive health sector statistics (annually and with no more than one year lag)	– Conduct a study aiming at developing HSIS and enhancing the capacity of data collection, processing, analysis and dissemination capacity.	– Ministry of Health (MOH)/ CSA	– Due attention should be given to information on traditional medical treatment and registered traditional healers, etc. – The introduction of the sectors' information system and human resource development require consultation with the CSA. – Adm. Record

12.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected output	Major Activities	Focal Institution	Remark
1.2	Nutrition Health and Survey	Incomplete. Although there is base line data through survey; regularly continuous survey is required	– Lack of clarity in the institutional arrangement among concerned bodies (incl. MOH, HNRIE, and CSA) for conducting survey	– To effectively monitor the welfare of the society, evaluate the impact of development policies, strategies and, programs so that poverty reduction objective can be realized	– Improve the design and execution of nutrition survey, – Regularize the conducting of the survey	– A well established nutritional data base supported by nutritional survey conducted every five years	– Establish inter-institutional committee to study the institutional arrangement for conducting the survey and the establishment of data bank. – Data users and producers should work towards improving the design (incl. coverage, level of disagree., reporting level and dissemination system) of the survey	CSA	– The study needs to be synchronized with the Welfare Monitoring Survey. – Among the concerned institutions incl. MOFED, MoE, CSA, MoH, HNRIE – Up-to now it is well recognize that CSA has conduced three surveys in 1982, 1992 and March 1998. – Survey

12.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected output	Major Activities	Focal Institution	Remark
2	**Education**								
2.1	Compilation of Education Sector Statistics – Public – Private – Informal – Literacy – Highest grade completed – Reasons for drop out from learning at different level – Tracer study	– Not comprehensive, up to date and some of the data reveal inconsistency. The available education sector statistical shows a lag of two years, it fails to capture relevant details particularly data on Pvt. Sector and informal programs, and budget related data are inconsistent with that of MoF.	– Delay and irregularity in the flow of information from regions – Absence of consultation of MOFED while designing budget related information reporting format. – Absence of periodical review of data reporting system, and capacity up-grading effort	– To provide a comprehensive and timely information required for compiling parameters, designing sector strategy and policy, prepare SIP and monitor changes	– Review develop and introduce a sustainable Education Sector Information System (ESIS) – Enhance data compilation and reporting capacity at all for the sector	– A comprehensive education sector statistics (annually and with no more than one year lag) – Primary data ought to be presented in every four years if possible by CSA survey	– Review the present education sector information system and capacity and design a program for improvement – Implement as per the recommendations step by step	MOE/CSA	– The introduction of the sectors information system and human resource development required consultation with of the CSA – – Adm. Record

12.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected output	Major Activities	Focal Institution	Remark
3	**Media**								
3.1	Compilation of Media Statistics (TV, Radio and Newspapers Circulation)	– Not comprehensive. The available data is not adequate enough to understand the sectors' capacity, service coverage etc.	– Due attention is not given to the compilation the sectors' statistics – Lack of institutional capacity and established system of data compiling, processing analysis and dissemination system	– To provide a comprehensive and up to date information required to effectively manage the development of the sector	– Develop and introduce a sustainable data compilation analysis and reporting system – Strengthen institutional capacity	– A comprehensive statistical report (every year with no more than one year lag)	– Review the existing data compilation system, capacity and design a program for improvement – Implement as per the recommendations	MOI	– The introduction of the sector's information system and human resource development required consultation with the CSA – Adm. Record

12.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected Output	Major Activities	Focal Institution	Remark
3.2	Compilation of Recreation and Entertainment Statistics	– Not up to date and comprehensive. The latest figure available on theatrical arts is for 1994/95 only and data on the number and activities of local bands not compiled.	Not given due attention.	– To provide up to date information required for monitoring the development of the sector.	– Institutionalize the compilation of data on entertainment – Develop and introduce a system of data collection processing and dissemination.	– Annual statistical report on recreation and entertainment (with no more than one year lag).	– Review the detail statistical need, design a system for compiling an to date and comprehensive data on recreation and entertainment – Implement as per the recommendation	MOI	– The review should involve all concerned institutions including the CSA. – Adm. Record
4	**Sports**								
4.1	Compilation of Sport Statistics	– Not up to date. The latest statistical report available refers to 1994/95.	Capacity gap in compiling and analyzing the information.	– To closely monitor the changes and design a strategy for a sustainable development of the sector.	– Enhance the institutional capacity of the Sport Commission in collecting analysis and dissemination of information on sports.	– Annual statistical report on sports (with no more than one year lag).	– Conduct a study to improve the timeliness and analytical content of the report.	Sport commission (SC)	– The CSA is expected to ensure the approach and methodology of data collection adopted is up to standard. – Adm. Record

12.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected output	Major Activities	Focal Institutions	Remark
5	**Welfare**								
5.1	Welfare Monitoring Survey	– Not compiled – Incomplete – Not on time	– Lack of resources (finance, human and material) – Weak attention and lack of full commitment.	– Monitoring and evaluating poverty situation of the country at various levels	– Establish a unit there is a need at the appropriate institution to analyzed data collected by the CSA – Allocate the required resources (human, financed material)	– Data base on welfare indicators. – Make tracer study at least every two years	Review the existing arrangement for conducting the survey and analysis of the results.	CSA/ _____ MOFED/ relevant institutions	Survey
5.2	Job-sector survey at compilation of employment statistics	– Not complete – Not exist as required	– Lacking continuous monitoring – Weakens of mechanism regarding providing ---------- from the respective offices	– Monitoring and ----- the employment situation	– ------ ----- a strong employment exchange offices at various levels	– provide demand and supply of labor – setting a pre condition for labor force survey – Creating ---------- study fertile ground	– Review data situation of job identifies vacancies of various feeling in relation to skilled and skilled and labor	MOLSA/ CSA/FCSC	Survey in every 5 years will narrow and squeeze gaps

12.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected output	Major Activities	Focal Institutions	Remark
6	**Street Children**								
6.1	Survey of Street Children and Orphanage	– Inadequate	– Shortage of financial resource and trained manpower – the available information covers limited area, such as urban only	– To know the extent of the problem and its cause – To create awareness among policy makers	– Undertake survey at on regular interms certain period in collaboration with relevant institutions – Identify the area and gather data on disadvantaged and vulnerable groups – Encourage professionals to participate on the study activity	– A comprehensive and up to date information on street children and Orphanage (every three years)	– Conduct a study to introduce a sustainable system of data collection, processing and dissemination	CSA/ MOLSA/ NFCAO /MOE/ Community	Survey

12.5: (Cont'd)

No.	Statistical Program	Problem of the Information	Cause of the Problem	Objective of the Program	Program Strategy	Expected output	Major Activities	Focal Institutions	Remark
7	**Statistics on Disabilities**								
7.1	Survey of the Disabled	– Inadequate	– Resource constraint – unable to cover the whole regions	– To formulate appropriate policy and strategy for data collection – To know the extent of the problem – Encourage professionals to participate on the study activity	– Develop a system of sustainable data collection, processing , dissemination	– Undertake survey at a certain period in collaboratio n with relevant institutions – Create data base	Undertake study to improve the data base	CSA/ MOLSA/ NDRPC	Survey

PART III

PART III: PRIORITIZED MEDIUM - TERM NATIONAL STATISTICAL PROGRAM FOR ETHIOPIA (1996 - 2000 EFY)

1. PRIORITIZED STATISTICAL PROGRAMS

1.1 The Bases for Prioritization

Part II of this document has been devoted to the assessment of the existing database, review of data requirements and identification of data gaps for all "sectors" of the economy. Once statistical data gaps are identified and umbrella programs are formulated for each "sector" of the economy, the next logical step is to set priorities given financial resources constraints and institutional capacity of program implementing organizations as well as the criticality of the data gap.

Accordingly, the following prioritization bench-marks, among others, were taken in to account while ranking the various programs.

a) The relevance of the socio-economic data in assessing and monitoring the impact of the ongoing stabilization and Economic Reform Programs;

b) The priority accorded to sectors in line with the development strategy adopted in Ethiopia;

c) Economies of scale that may be enjoyed in the data collection process through combining programs that could be conducted simultaneously;

d) Whether or not any one survey or census has been conducted so far in relation to the activities of the sector concerned;

Though these are the main criteria for prioritizing the various statistical programs for implementation, in practice a number of amendments were made to balance, For example, although ADLI puts agriculture at the forefront, this does not necessarily mean that all agricultural programs accorded first priority. Moreover, the ranking of programs also takes into account institutional capacity.

1.2 Prioritized Medium Term Statistical Program

Consistent with the previous section, statistical programs have been classified into two major groups. These are census, survey and registration based primary data collection programs and statistical data generated through administrative records. Altogether, about 87 programs distributed across all sectors have been identified in the prioritization process. Out of the survey-based programs, some are on-going conducted by the CSA. The annual crop production forecast and the annual crop production survey are typical examples of these in the Agriculture sector.

The major actor(s) in the execution of survey and census based programs is either the CSA alone or the CSA in collaboration with other government agencies or the respective government agency in collaboration with the CSA. The main actor(s) have been indicated in the prioritized Medium Term Program Matrix column "Focal Institution". The order in which focal institutions stated got special significance. The institution indicated before the stroke ("/") is the one that is expected to take the initiative and responsibility in the program execution process where as, those indicated after the stroke ("/") are expected to play a collaborative role in the execution process.

Taking into account the repetitive nature of some of the programs, altogether a total of 137 statistical progress are expected to be undertaken during the five program years, and census and survey based programs accounts for some 65% while the balance are administrative records.

Table 1 **Prioritized Medium Term Statistical programs (2003/04 - 2007/08)**

Sr. No.	Program	Frequency	Years					Focal Institutions	Remark New/Existing
			2003/04	2004/05	2005/06	2006/07	2007/08		
1	**Macro Economy**								
1.1	Compilation of the Full Sequence of National Accounts	Annually	*	*	*	*	*	MOFED	New
1.2	Compilation of Regional Income Account	Annually	*	*	*	*	*	RPB/ MOFED	On-going
1.3	Compilation of Data on Expenditure and Revenue Performance of Self Financing Organizations	Quarterly	*	*	*	*	*	MOFED	New
1.4	A Comprehensive and Well Disaggregated Government Finances Statistics (GFS)	Annually	*	*	*	*	*	MOFED	New
1.5	Compilation of Balance of Payments Statistics (BoP)	Quarterly	*	*	*	*	*	NBE	New
1.6	Monetary Survey and Data on Financial Sector Activities	Monthly	*	*	*	*	*	NBE	New
2	**Agriculture**								
2.1	Crop production Forecast	Annually	*	*	*	*	*	CSA	Existing
2.2	Crop Production Survey	Annually	*	*	*	*	*	CSA	Existing
2.3	Land Utilization Survey (Private Holdings)	Annually	*	*	*	*	*	CSA	Existing
2.4	Comprehensive Land Use Survey	Every 5 years				*		CSA/MOA	New
2.5	Cost of Production of Crops Survey	Every 3 years			*			CSA	New
2.6	Livestock, Poultry and Beehives Survey	Annually	*	*	*	*	*	CSA	Existing
2.7	Fishery Statistics (Survey and Compilation)	Annually	*	*	*	*	*	MOA/CSA	New
2.8	Pre and Post Harvest Grain Losses Survey	Every 5 years			*			CSA/EARO/ MOA	New
2.9	Agricultural Inputs and Practices Survey	Annually	*	*	*	*	*	CSA	Existing
2.10	Farm Building and Implements Survey	Every 10 years		*				CSA	New

...Table 1 continued

Sr. No.	Program	Frequency	Years					Focal Institutions	Remark
			2003/04	2004/05	2005/06	2006/07	2007/08		New/Existing
2.11	Profile of Peasant Institutions Survey	Every 3 years			*			CSA	New
2.12	Survey of State and Private Commercial Farms	Annually	*	*	*	*	*	CSA	Existing
2.13	National Agricultural Census	Every 10 years						CSA	Existing
3	**Environment & Natural Resources**								
3.1	Survey of Forest, Forest Products & Nursery Sites	Annually	*	*	*	*	*	MOA/RADB/CSA	New
3.2	Survey on Wood-Land Trees Spices	Annually	*	*	*	*	*	MOA/RADB/CSA	New
3.3	Soil Survey	Annually	*	*	*	*	*	MOA/EARO	New
3.4	Survey on Wild Life	Annually	*	*	*	*	*	EWCO/CSA	New
3.5	Survey on Wet-Lands	Annually	*	*	*	*	*	EWCO/CSA	New
3.6	Solid Waste Management	Annually	*	*	*	*	*	Reg.Mun./CSA/EPA/Inu.Bureau	New
4	**Water**								
4.1	Survey of Water Supply, Consumption and Sanitation Services	Annually				*	*	MWR/CSA	New
4.2	Survey of Potential and Utilized Water Resources by Different Uses	Annually				*	*	MWR/CSA	New
5	**Manufacturing**								
5.1	Survey of Medium and Large Scale Manufacturing Industries	Annually	*	*	*	*	*	CSA	Existing
5.2	Survey of Small Scale Manufacturing Industries	Every 3 years			*			CSA	Existing
5.3	Survey of Cottage/Handicraft Manufacturing Industries	Every 3 years			*			CSA	Existing
5.4	Census of Economic Establishments/Enterprises	Every 5 years		*				CSA	New

...Table 1 continued

Sr. No.	Program	Frequency	Years					Focal Institutions	Remark
			2003/04	2004/05	2005/06	2006/07	2007/08		New/Existing
6	**Construction**								
6.1	Survey of Contract Construction	Annually	*	*	*	*	*	CSA/MOIF	Existing
6.2	Compilation/Survey of Own Construction [1]	Annually				*	*	CSA/MOIF	New
7	**Mining and Quarrying**								
7.1	Compilation of Mining Statistics	Annually	*	*	*	*	*	CSA	Existing
7.2	Survey of Quarrying	Every 3 years		*			*	CSA/MOM	Existing
8	**Energy**								
8.1	Compilation of Energy prices and Costs by Fuel Type	Annually	*	*	*	*	*	CSA/MOM	New
8.2	Compilation of Energy production Supply and Consumption	Annually	*	*	*	*	*	CSA/MOM	New
8.3	Survey of Household Traditional Energy [2]	Every 5 years		*				CSA	New
9	**Trade**								
9.1	Survey of Distributive Trade and Services	Every 3 years			*			CSA	Existing
9.2	Compilation of Foreign Trade Statistics	Quarterly	*	*	*	*	*	CSA/Customs	Existing
9.3	Compilation of Tourism Statistics	Annually		*	*	*	*	CSA/ETC	New
9.4	Survey of Informal Sector	Every 3 years			*			CSA	Existing

[1] The Survey part could be conducted as part of Demographic Survey.

[2] Could be conducted as part of Household Consumption Survey.

...Table 1 continued

Sr. No.	Program	Frequency	Years					Focal Institutions	Remark
			2003/04	2004/05	2005/06	2006/07	2007/08		New/Existing
10	**Transport and Communication**								
10.1	Survey of Road Transport Statistics (Fright and passengers)	Every 5 years				*		CSA/RTA	New
10.2	Compilation of Road, Air, Rail, Water Transport and Transit Service	Annually	*	*	*	*	*	CSA/MOIF	Existing
10.3	Survey of Traditional and Intermediate Transport	Every 5 years					*	CSA/RTA	New
10.4	Compilation of Communications Statistics (Telecommunications and Postal Services)	Annually	*	*	*	*	*	CSA/MOIF	Existing
11	**Prices and Household Budget**								
11.1	Survey of Producers' price of Agricultural Commodities	Monthly	*	*	*	*	*	CSA	Existing
11.2	Survey of Producer's Prices of Manufactured Products (selected)	Quarterly	*	*	*	*	*	CSA	Existing
11.3	Survey of Retail prices of Goods and Services in selected markets	Monthly	*	*	*	*	*	CSA	Existing
11.4	Household Income, Consumption and Expenditure Survey	Every 5 years		*				CSA	Existing
11.5	Compilation of Commercial Freight Transport Tariff	Monthly	*	*	*	*	*	RTA	New
11.6	Construction of Consumer Price Index for National, and Regional	Monthly	*	*	*	*	*	CSA	Existing
11.7	Construction of Producer's Price Index for Agricultural Commodities	Quarterly	*	*	*	*	*	CSA	New

...Table 1 continued

Sr. No.	Program	Frequency	Years					Focal Institutions	Remark New/Existing
			2003/04	2004/05	2005/06	2006/07	2007/08		
11.9	Construction of Producers' price Index for Manufactured Products	Quarterly	*	*	*	*	*	CSA	New
11.10	Construction of Quantity Index for Manufactured Products	Quarterly	*	*	*	*	*	CSA	Existing
11.11	Construction of Export Unit Value/Price Index	Monthly	*	*	*	*	*	CSA/Customs	Existing
11.12	Construction of Import Unit Value/price Index	Monthly	*	*	*	*	*	CSA/Customs	Existing
11.13	Construction of Commercial Freight Transport Tariff Index	Monthly	*	*	*	*	*	CSA/RTA	New
11.14	Construction of Wage Index (??)	Quarterly						CSA/MOLSA	New
11.15	Construction of Land Lease Rate Index (??)	Monthly						CSA/IOE	New
11.16	Construction of Real Interest Rate Index	Monthly	*	*	*	*	*	NBE/CSA	New
11.17	Construction of Real Exchange Rate Index	Monthly	*	*	*	*	*	NBE/CSA	New
12	**Population and Employment**								
12.1	Population and Housing Census							Census Commission Office	Existing
	a. Census Cartography	Every 10 Years	*	*				CCO	Existing
	b. Census Enumeration			*				CCO	Existing
12.2	Demographic and Health Survey (DHS)	Every 5 years	*					CCO	Existing
12.3	Migration Survey	Every 10 years			*			CCO	Existing
12.4	Sample Vital Events Statistics Registration	Annually	*	*	*	*	*	CCO	Existing
12.5	Compilation of Registered Job-Seekers	Quarterly	*	*	*	*	*	MOLSA	New
12.6	Labor Force Survey	Every 5 years	*					CSA	Existing
12.7	Current Employment Survey	Annually	*	*	*	*	*	CSA	New
13	**Social Statistics**								
13.1	Compilation of Health Sector Statistics	Annually	*	*	*	*	*	MOH/CSA	Existing

...Table 1 continued

Sr. No.	Program	Frequency	Years					Focal Institutions	Remark
			2003/04	2004/05	2005/06	2006/07	2007/08		New/Existing
13.2	Health and Nutrition Survey	Every 5 years				*		CSA	Existing
13.3	Compilation of Education Sector Statistics	Annually	*	*	*	*	*	MOE/CSA	Existing
13.4	Compilation of Media Statistics	Annually	*	*	*	*	*	MOI/CSA	Existing
13.5	Compilation of Recreation and Entertainment Statistics	Annually	*	*	*	*	*	MOI/CSA	Existing
13.6	Compilation of Sport Statistics	Annually	*	*	*	*	*	MOI/CSA	Existing
13.7	Survey of Orphanage and Street Children	Every 5 years	*					CSA/MOLSA	New
13.8	Survey of the Disabled	Every 10 years			*			CSA/MOLSA	Existing
13.9	Welfare Monitoring Survey	Every 3 years		*				CSA	Existing
13.10	Time Budget Survey	Every 10 years			*			CSA	New
13.11	Core Welfare Monitoring Questionnaire Survey	Annually	*	*	*	*	*	CSA	New
13.12	Community Level Variables Survey	Annually	*	*	*	*	*	CSA	New

(??) Suggested to be part of the long-term program.

2. PROGRAM STRATEGY AND IMPLEMENTATION ARRANGEMENT

2.1 Program Strategy

A reliable, timely and sustainable flow of statistical data rests not only on the knowledge of data needs identified under this program but also on efforts made towards establishing an effective and efficient statistical system and capability for the future. In this regard the Medium Term Program puts forward a worthy challenge to get the statistical data collection, processing and dissemination system right. Successful implementation of this huge task in turn calls for unreserved commitment from all stakeholders (users and producers). Moreover a concentrated effort is required to overhaul the legal and institutional arrangement, the issue of building a sustainable capacity in handling statistical works, and the issue of cost sharing between the producers and users of statistics.

2.1.1 Legal and Institutional Issues

As already noted in the background, radical changes have been introduced in the political, social and economic sphere since 1991. The changes influence the role of various institutional units in the economy which in turn believed affect the pattern of demand for information. Among the most important changes in this regard was the decentralization of the administration set-up in the country thereby logging the foundation for regional governments enabling them self - rule and management of their own socio-economic affairs. At the same time, the liberalization of the economy created an environment for increased participation of the private sector and private institutions in the economy. This again not only boost the demand for statistical data but also signal the emergence of other institutions than the CSA as a source of information.

Moreover, in a country like Ethiopia where the gap between the demand for and supply of statistical data at the same time acquiring them confront stiff competition for resources, the need for coordination and harmonization of every effort becomes crucial.

To this effect, the statistical act and the institutional arrangement needs to take into account the two-part arrangement, the provision of service and regulatory task. The CSA as service provider is responsible for the collection, compilation, analyzes and dissemination of official statistics that have a broad range of use and have national scope and coverage. On the other hand, the CSA is responsible for coordination and standardization and regulation of statistical activity in the country. In this regard, the forth coming statistical act and institutional arrangement is expected to ensure that CSA shall be in a better position to discharge its two-part responsibility.

Firstly, planning for statistical data is an important step towards ensuring the collection of the right information at the right time that meets the requirements of most users. Moreover, it would facilitate effective implementation of the program and improve the efficiency of resource utilization. Therefore, the practice of planning for data should

continue with progressive effort aimed at improving data management in a more institutional and participatory approach. In this regard, the setting up of user-producer forum becomes crucial. While executing the envisaged programs, regular follow-up and critical evaluation is essential for timely intervention to ensuring national priority and program effectiveness.

Secondly, apart from statistical issues addressed in this Program Document which are intended for the creation of an enabling environment for the implementation of the Medium Term Program which may require periodic review, there are a number of issues that require consideration. These include the creation of awareness among stakeholders through sensitization programs on the importance of statistical data, the duties and responsibilities of individuals and the public and private institutions that are actors in the data system. Thus, the reliability and timeliness of statistical data collected and its impact on the quality of economic management by and large rests on the awareness of the various stakeholders.

2.1.2 Capacity Building

The need for building a sustainable capacity in data collection, processing and dissemination remains to be a challenge. In this respect, a continuous skill-up-grading program for staff involved in statistical work and the availability of the right technology and logistical support has become extremely essential. The sustainability of human resource development in turn calls for a strategy to build the national training and re-training capability. To this end, the CSA, AAU and MOFED should work towards the introduction of sustainable problem-oriented training programs.

Improving statistical database generated through administrative records require no less attention to those managed by the CSA. To regularize the availability and flow of these information require a through study to identify the problems in managing data so that appropriate national data management system can be developed, the institutional infrastructure and capacity constraints be addressed adequately. Moreover, enter-institution and inter-governmental exchange of information need to be improved to enhance the efficiency of resource utilization devoted for generating statistical data at national level.

2.1.3 Cost Sharing

Establishing a strong national statistical database has had an enormous cost implication. On the other hand, failure to plan the program has negative trade-offs in terms of mis-allocation of national resources by the public and private sectors and individuals which lead to a serious welfare loss to the society as economic management and monitoring falls at the mercy of guess work in the absence of reliable data that adequately describe economic activity as well as its malfunctioning. Therefore, urgent and due attention should be accorded to establishing a robust statistical system in the country. The total dependence of capacity building and the establishment of a national statistical database on limited government budget may not be sustainable. Cost sharing between the public and the private sector should be envisaged in the future. Information should not be considered totally as public good. Therefore, in the future, progressive effort needed to be made for statistical data collection, processing and

dissemination work to be viewed in a cost-benefit perspective. This in turn entails working out modalities for the participation of the various stakeholders in this endeavor.

2.2 Implementation Arrangement

A detailed and articulated work program has to be worked out subsequently for the smooth functioning and accomplishment of this Medium Term Program. The parties to be involved in undertaking surveys and census or in compiling and disseminating administrative records have to be provided with the requisite information well in advance about their participation modalities and roles to be played if any.

Capacity enhancement in terms of manpower training, computing facilities, technical advice, etc. shall be given the utmost emphasis. The CSA in collaboration with federal executing agencies and regional bodies is expected to play a vanguard role in this endeavor.

3. RESOURCE REQUIREMENT AND COSTS

3.1 Resource Requirement

As indicated before, the effectiveness of this medium-term program rests partly on the capacity to design and implement statistical surveys and census, well as the capacity in establishing a sustainable data flow system and institutional strength for compiling administrative records. This in turn required inputs particularly for technical assistance, recruitment and training of professional and support staff, the provision of logistics such as computing equipments and transport vehicles, and availability of sufficient fund to cover operational and recurrent costs.

The resource requirement given here refers to the requirements of the CSA in conducting, processing and dissemination of surveys and census results as per the program seen earlier. Therefore, the resource requirement and the preliminary cost estimate here does not take into account the requirement to strengthen the capacity of various government institutions in managing data generated from administrative records. The latter requires a study pertaining to the formulation of a capacity building program to improve the flow and reliability of statistical data compiled from administrative records. Moreover, the resource requirement given here does not include newly proposed surveys whose methodology was not clear while formulating the program.

As could be understood from the table below (Table 3.1), currently the CSA's human resource capacity excluding contract workers is 1435. Out of which 1001 are permanent professionals and sub-professionals. The number of contract workers CSA employ every year depends on the work load in conducting census and surveys.

Implementation of the proposed medium-term statistical program basically require a substantial increase in the staff of the CSA both in number and composition. As preliminary assessment result indicates, an additional of 469 permanent workers should be recruited during the five year program period. The size of contract workers to be recruited each year depends on the volume of statistical work.

Table 3.1: **Additional Permanent Employees Required by the CSA (1996 – 2000 E.F.Y)**

Permanent Employee by Major Category	Available in 1995 EC	Additional Requirement					Total Additional
		1996	1997	1998	1999	2000	
Professional	105	26	28	28	26	26	134
Sub-professional	896	-	-	-	-	-	-
Support Staff	434	67	67	67	67	67	335
Total	**1435**	**93**	**95**	**95**	**93**	**93**	**469**

3.2 Preliminary Cost Estimates

An attempt to provide preliminary cost estimate to undertake census and survey based statistical programs by the CSA was made, taking into account methodological considerations. The following table (Table 3.2) provides an indicative cost estimate of

the program for the total and major components including capital costs. The capital component covers the operational cost of censuses and surveys. The cost estimate given below however doesn't reflect the full cost of the program. Among the program whose cost not included here include, surveys with unknown methodologies and capital building required to enhance data generated from administrative records.

Table 3.2: **Preliminary Cost Estimate for Undertaking Census and Survey Based Statistical Programs (1996 – 2000 E.F.Y)**

(000' Birr)

	1996	1997	1998	1999	2000	Total
Recurrent	-	-	-	-	-	-
Capital	39,500.0	60,000.0	65,000.0	55,000.0	45,000.0	265,000.0
Total	**39,500.0**	**60,000.0**	**65,000.0**	**55,000.0**	**45,000.0**	**265,000.0**

Preliminary Cost Estimates of Medium Term Statistical Programs
2003/04-2007/08 (1996-2000 E.F.Y)

Year	Sr.No.	Type of Survey / Activity	Survey Base	Area Coverage	Reporting Level	Pre. Cost Est.
1996 E.F.Y 2003/04		**Integrated Surveys**				39.5
	1	Crop Production forecast	Household	Rural	Zone	
	2	Crop Production Survey	Household	Rural	Zone	
	3	Land Utilization Survey	Household	Rural	Zone	
	4	Livestock, Poultry & Beehives Survey	Household	Rural	Zone	
	5	Agricultural Inputs & Practices Survey	Household	Rural	Zone	
	6	Survey of State & Private Commercial Farms	Establishment	Rural	Zone	
	7	Survey of Medium & Large Scale Manufacturing Industries	Establishment	Urban	National	
	8	Survey of Contract Construction	Establishment	Urban	National	
	9	Current Employment Survey	Household	Urban	Nat.,Reg. & Town	
	10	Labour Force Survey	Household	Rural & Urban	Zone, Rural & Urban	
	11	Survey of Orphanage and Street Children	Household	Urban	National	
	12	Survey of Producer's Price of Agricultural Commodities	Household	Rural	Zone	
	13	Survey of Producer's Price of Manufactured Products	Establishment	Urban	National	
	14	Survey of Retail Prices of Goods & Services	Market	Urban	N,Z,& Ur.Center	
	15	Compilation of Foreign Trade Statistics	Office work	-	National	
	16	Compilation of Transport & Communication Statistics	Office work	-	National	
	17	Construction of Consumer Price Index	Office work	-	National & Regional	
	18	Construction of Producer's Price Index for Agricultural Commodities	Office work	-	Nat. & Rural	
	19	Construction of Producer's Price Index for Manufactured Products	Office work	-	National	
	20	Construction of Quantity Index for Manufactured Products	Office work	-	National	
	21	Construction of Export Unit Value/Price Index	Office work	-	National	
	22	Construction of Import Unit Value/Price Index	Office work	-	National	
	23	Core Welfare Monitoring Questionnaire Survey	Household	Rural & Urban	Zone	
	24	Community Level Variables Survey	Community	Rural & Urban	Woreda	
		TOTAL				**39.5**

Preliminary Cost Estimates of Medium Term Statistical Programs
2003/04-2007/08 (1996-2000 E.F.Y)

Year	Sr. No.	Type of Survey / Activity	Survey Base	Area Coverage	Reporting Level	Pre. Cost Est.
						60.0
1997		**Integrated Surveys**				
E.F.Y	1	Crop Production forecast	Household	Rural	Zone	
2004/05	2	Crop Production Survey	Household	Rural	Zone	
	3	Land Utilization Survey	Household	Rural	Zone	
	4	Livestock, Poultry & Beehives Survey	Household	Rural	Zone	
	5	Farm Building and Implementation Survey	Household	Rural	Zone	
	6	Agricultural Inputs & Practices Survey	Establishment	Rural	Zone	
	7	Survey of State & Private Commercial Farms	Establishment	Urban	National	
	8	Survey of Medium & Large Scale Manufacturing Industries	Establishment	Urban	National	
	9	Survey of Contract Construction	Establishment	Urban	Region	
	10	Survey of Quarrying	Establishment	Urban	National	
	11	Census of Economic Establishments/Enterprises	Household	Rural & Urban	Zone	
	12	Household Income, Consumption and Expenditure Survey	Household	Rural & Urban	Zone	
	13	Welfare Monitoring Survey	Household	Urban	Nat.,Reg. & Town	
	14	Current Employment Survey	Household	Rural & Urban	Zone	
	15	Survey of Household Traditional Energy	Household	Rural	Zone	
	16	Survey of Producer's Price of Agricultural Commodities	Establishment	Urban	National	
	17	Survey of Producer's Price of Manufactured Products	Market	Urban	Nat,Z, & Ur.Center	
	18	Survey of Retail Prices of Goods & Services	Office work	-	National	
	19	Compilation of Foreign Trade Statistics	Office work	-	National	
	20	Compilation of Transport & Communication Statistics	Office work	-	National & Regional	
	21	Construction of Consumer Price Index	Office work	-	National & Rural	
	22	Construction of Producer's Price Index for Agricultural Commodities	Office work	-	National	
	23	Construction of Producer's Price Index for Manufactured Products	Office work	-	National	
	24	Construction of Quantity Index for Manufactured Products	Office work	-	National	
	25	Construction of Export Unit Value/Price Index	Office work	-	National	
	26	Construction of Import Unit Value/Price Index	Household	Rural & Urban	Zone	
	27	Core Welfare Monitoring Questionnaire Survey	Community	Rural & Urban	Woreda	
	28	Community Level Variables Survey				
		TOTAL				**60.0**

Preliminary Cost Estimates of Medium Term Statistical Programs
2003/04-2007/08 (1996-2000 E.F.Y)

Year	Sr. No.	Type of Survey / Activity	Survey Base	Area Coverage	Reporting Level	Pre. Cost Est.
1998		**Integrated Surveys**				65.0
E.F.Y	1	Crop Production Forecast	Household	Rural	Zone	
2005/06	2	Crop Production Survey	Household	Rural	Zone	
	3	Land Utilization Survey	Household	Rural	Zone	
	4	Livestock, Poultry & Beehives survey	Household	Rural	Zone	
	5	Agricultural Inputs & Practices Survey	Household	Rural	Zone	
	6	Cost of Production of Crops Survey	Household	Rural	Zone	
	7	Profile of Peasant Institutions Survey	Establishment	Rural	Zone	
	8	Pre and Post Harvest Grain losses Survey	Household	Rural	Zone	
	9	Survey of State and Private Commercial Farms	Establishment	Rural	Zone	
	10	Survey of Medium & Large Scale Manufacturing Industries	Establishment	Urban	National	
	11	Survey of Contract Construction	Establishment	Urban	National	
	12	Survey of Cottage/Handicrafts Manufacturing Industries	Establishment	Rural & Urban	Urban & Town	
	13	Survey of Small Scale Manufacturing Industries	Establishment	Rural & Urban	Urban & Town	
	14	Survey of Distributive Trade & Services	HH & Establish	Urban	Urban & Town	
	15	Survey of Informal Sector	Household	Rural & Urban	Rural & Urban	
	16	Survey of the Disabled	Household	Rural & Urban	National	
	17	Time Budget Survey	Household	Rural & Urban	Nat.,Reg.,Ru.&Ur.	
	18	Current Employment Survey	Household	Urban	Nat.,Reg. & Town	
	19	Survey of Producer's Price of Agricultural Commodities	Household	Rural	Zonal	
	20	Survey of Producer's Price of Manufactured Products	Establishment	Urban	National	
	21	Survey of Retail Prices of Goods and Services	Market	Urban	Nat, Z & Ur.Center	
	22	Compilation of Foreign Trade Statistics	Office work	-	National	
	23	Compilation of Transport & Communication Statistics	Office work	-	National	
	24	Construction of Consumer Price Index	Office work	-	National & Regional	
	25	Construction of Producer's Price Index for Agricultural Commodities	Office work	-	Nat & Rural	
	26	Construction of Producer's Price Index for manufactured products	Office work	-	National	
	27	Construction of Quantity Index for Manufacturing Products	Office work	-	National	
	28	Construction of Export Unit Value/ Price Index	Office work	-	National	
	29	Construction of Import Unit Value/ Price Index	Office work	-	National	
	30	Core Welfare Monitoring Questionnaire Survey	Household	Rural & Urban	Zone	
	31	Community Level Variables Survey	Community	Rural & Urban	Woreda	
		TOTAL **193**				**65.0**

Preliminary Cost Estimates of Medium Term Statistical Programs
2003/04-2007/08 (1996-2000 E.F.Y)

Year	Sr. No.	Type of Survey / Activity	Survey Base	Area Coverage	Reporting Level	Pre. Cost Est.
1999		**Integrated Surveys**				55.0
E.F.Y	1	Crop Production Forecast	Household	Rural	Zone	
2006/07	2	Crop Production Survey	Household	Rural	Zone	
	3	Land Utilization Survey	Household	Rural	Zone	
	4	Livestock, Poultry & Beehives Survey	Household	Rural	Zone	
	5	Agricultural Inputs & Practices Survey	Household	Rural	Zone	
	6	Comprehensive Land Use Survey	Establishment	Rural	Zone	
	7	Survey of State and Private Commercial Farms	Establishment	Urban	National	
	8	Survey of Medium & Large Scale Manufacturing Industries	Establishment	Urban	National	
	9	Survey of Contract Construction	Establishment	Urban	National	
	10	Survey of Own Construction	Household	Urban	Nat.,Reg. & Town	
	11	Current Employment Survey	Household	Rural	Zone	
	12	Survey of Producers Price of Agricultural Commodities	Establishment	Urban	National	
	13	Survey of Producers Prices of Manufactured Products	Establishment	Urban	National	
	14	Survey of Road Transport Statistics (Fright & Passengers)	Household	Rural & Urban	National	
	15	Health and Nutrition Survey	Office work	-	National & Regional	
	16	Construction of Consumers Price Index	Office work	-	Nat. & Rural	
	17	Construction of Producers Price Index for Agricultural Commodities	Office work	-	National	
	18	Construction of Producers Price Index for Manufactured Products	Office work	-	National	
	19	Construction of Quantity Index for Manufacturing Products	Office work	-	National	
	20	Compilation of Foreign Trade Statistics	Office work	-	National	
	21	Compilation of Transport and Communication Statistics	Office work	-	National	
	22	Construction of Export Unit Value/ Price Index	Office work	-	National	
	23	Construction of Import Unit Value/ Price Index	Household	Rural & Urban	Zone	
	24	Core Welfare Monitoring Questionnaire Survey	Community	Rural & Urban	Woreda	
	25	Community Level Variables Survey	Market	Urban	Nat, Z & Ur.Center	
	26	Survey of Retail Prices of Goods and Services				
TOTAL						**55.0**

Preliminary Cost Estimates of Medium Term Statistical Programs
2003/04-2007/08 (1996-2000 E.F.Y)

Year	Sr. No.	Type of Survey / Activity	Survey Base	Area Coverage	Reporting Level	Pre. Cost Est.
2000 E.F.Y 2007/08		Integrated Surveys				45.5
	1	Crop Production Forecast	Household	Rural	Zone	
	2	Crop Production Survey	Household	Rural	Zone	
	3	Land Utilization Survey	Household	Rural	Zone	
	4	Livestock ,Poultry & Beehives survey	Household	Rural	Zone	
	5	Agricultural Inputs and Practices Survey	Household	Rural	Zone	
	6	Survey of State and Private Commercial Farms	Establishment	Rural	Zone	
	7	Survey of Producer's Prices of Agricultural Commodities	Household	Rural	Zone	
	8	Survey of Producer's Prices of Manufactured products	Establishment	Urban	National	
	9	Survey of Retail Prices of Goods & Services	Market	Urban	Nat., Z & Ur. Center	
	10	Survey of Medium & Large Scale Manufacturing Industries	Establishment	Urban	National	
	11	Survey of Contract Construction	Establishment	Urban	Region	
	12	Survey of Own Construction	Establishment	Urban	National	
	13	Current Employment Survey	Household	Urban	Nat.,Reg. & Town	
	14	Survey of Traditional and Intermediate Transport	Household	Rural & Urban	National	
	15	Construction of Consumer Price Index	Office work	-	National & Regional	
	16	Construction of Producer's Price Index for Agricultural Commodities	Office work	-	Nat. & Rural	
	17	Construction of Producer's Price Index for Manufactured Products	Office work	-	National	
	18	Compilation of Foreign Trade Statistics	Office work	-	National	
	19	Compilation of Transport & Communication Statistics	Office work	-	National	
	20	Construction of Quantity Index for Manufacturing Products	Office work	-	National	
	21	Construction of Export Unit Value/ Price Index	Office work	-	National	
	22	Construction of Import Unit Value/ Price Index	Office work	-	National	
	23	Core Welfare Monitoring Questionnaire Survey	Household	Rural & Urban	Zone	
	24	Community Level Variables Survey	Community	Rural & Urban	Woreda	
		TOTAL				**45.5**

ANNEXES

ANNEXES

Annex 1: List of Censuses and Surveys Conducted by the CSA (1961-2002)

		Year.(G.C)
1	H/H Income, Consumption and Expenditures Surveys	
	a) Addis Ababa H/H Budget Survey	1963
	b) Rural H/H Expenditure and Consumption Survey	1968 & 1981
	c) Addis Ababa H/H Expenditure and Consumption Survey	1968
	d) Urban H/H Income, Consumption and Expenditure Survey	1974
	e) H/H Income, Consumption and Expenditure Survey	1995-1996, 1999, 2000
2	Sample Surveys and Censuses	
	a) First Round National Sample Survey	1963
	b) Second Round National Sample Survey	1968
	c) Addis Ababa Population and Housing Census	1961 & 1968
	d) Asmara Population and Housing Census	1968
	e) Addis Ababa Housing Registration and Demographic Survey	1978
	f) Rural Demographic Survey and Agricultural Sample Survey	1979
	g) Rural Demographic Survey	1980 & 1981
	h) Rural Sample Vital Registration	1983 - 1987, 1997-1999
	i) Demographic and Health Survey	2000
3	Agricultural Sample Survey	
	a) Agricultural Sample survey *	1981-1991 & 1994-2001
	b) Crop Production Forecasting Survey	1981-1991 & 1994-2002
4	National Fertilizer Bench-Mark Survey (Private Peasant Holdings of Meher and Belg Seasons)	1997
5	Agricultural Crop, Livestock and Population Sample Census of Harari Region	1997
6	Enset Survey	1997
7	Addis Ababa H/H Energy Consumption Survey	1979 & 1980
8	Addis Ababa Economic Establishment's Census	1984, 1992
9	Rural Survey of Community Level Variables	1981
10	Rural Health Survey	1982 & 1983
11	rural Nutrition Survey	1982 & 1983
12	Health and Nutrition Survey	1998
13	Fertility Survey of Urban Addis Ababa	1995
14	Labor Force Surveys	
	a) Addis Ababa Labor Force and Housing Survey	1976
	b) Labor Force and Housing survey in '17 Major Towns	1978
	c) Rural Labor Force Survey	1982, 1987/88
	d) National Labour Force survey	1999
15	Population and Hosing Census (I and II)	
	a) Preparatory Activities Including Census Manpower	1981-1984, 1992-1994
	b) Population and Housing Census Enumeration	1984, 1994
	c) Census data Preparation, Processing and Report Writing	1984-1989, 1994-1999
16	Base Line Socio-Economic and Demographic Study of Resettled Population	1984
17	National Family and Fertility Survey	1990
18	Rural Nutrition Survey (core Module)	1992
19	Welfare Monitoring survey	1995-1996, 1999
20	Survey of Disabled Population (Amhara, Oromia and SNNP)	1996
21	Survey of Small Scale Industries	1997

* Includes Area and production (main and Belg seasons), crop land utilization, Livestock and poultry and Agricultural practice (main and Belg seasons).

Annex 1: (cont'd)

22	Survey of Cottage, Handicrafts	1997
23	Survey of Distributive Trade	1997
24	Informal Sector Survey	1996
25	Survey of Contract Construction-Activities	1995, 1999, 2000
26	Survey of Mining and Quarrying (Pilot)	1999
27	Regular Statistical Activities	
	a) Survey of Manufacturing Industries	1963-2002
	b) Transport and Communications Statistics	1963-2001
	c) Retail Price Survey for Addis Ababa	1965-2001
	d) Statistical Abstract of Ethiopia	1963-2001
	e) Retail Price Survey in Selected '23 urban Centers (monthly)	1974-2002
	f) Rural Producers and Retail Price Survey (Monthly)	1974-1991 & 1994-2002
	g) Consumers Price Indices	1996-2002
	h) External Merchandise Trade	1990, 2000, 2001