MULTI-YEAR INTEGRATED STATISTICAL PLAN

REPUBLIC OF TAJIKISTAN

16 March 2005

Preface

This Multi-year Integrated Statistical Plan was developed by the State Statistical Committee (Goskomstat (GKS)) of the Republic of Tajikistan, supported by Mr. Alex Korns, a consultant on contract for Goskomstat.

The draft follows the guidelines as developed by the World Bank. It also takes account of the guidelines laid down in the Marrakech Action Plan for Statistics (MAPS), particularly with reference to the need to 'mainstream strategic planning for statistics' in the form of a 'National Statistical Development Plan,' or 'Statistical Master Plan.'

The development of the plan was based on consultations within GKS and consultations with major partners in the statistical system.

Production of this plan has only been possible due to intensive work within GKS and financial help from the World Bank.

Dushanbe, 16 March 2005

M. S. Shabazov
Chairman

Glossary

ADB	Confederation of Independent States
CIS	Consumer Price Index
CPI	General Data Dissemination Standards (IMF)
GDDS	Gross Domestic Product
GDP	Geographic Information System
GIS	Goskomstat (State Statistical Committee)
GKS	Geographic Positioning System
GPS	Household Budget Survey
HBS	International Comparisons Project
ICP	Information and Communications Technology
ICT	ISDN Digital Subscriber Line
IDSL	Integrated Services Digital Network
ISDN	International Monetary Fund
IMF	International Standard Classification of Education
ISCED	International Standard Industrial Classification
ISIC	Information Technology
IT	Labor Force Survey
LFS	Marrakech Action Plan for Statistics
MAPS	Millennium Development Goals
MDG	Main Computing Center
MCC	Multi-year Integrated Statistical Program
MISP	Non-Observed Economy
NOE	National Statistical Development Strategy
NSO	National Statistical Organization (generic)
NSO	Organization for Economic Cooperation and Development
OECD	The Partnership in Statistics for Development in the 21st Century
PARIS21	Personal Consumption Expenditures
PCE	Poverty Reduction Strategy Paper
PRSP	Producer Price Index
PPI	Quarterly national accounts
QNA	Review of Standards and Codes (IMF)
ROSC	Statistical Capacity Building
SCB	Special Data Dissemination Standards (IMF)
SDDS	Statistical Master Plan
SMP	System of national accounts
SNA	State Register of Enterprises and Organizations
SREO	Statistical Package for the Social Sciences
SPSS	Technical assistance
TA	Technical Assistance for CIS
TACIS	United Nations Development Program
UNDP	United Nations Statistical Division
UNSD	World Bank
WB	
Asian Development Bank	

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1. Introduction

1.1 Summary of recent related government-led processes

In recent years, three government-led processes have had a major impact on statistical requirements for Tajikistan.

First, on March 24, 2000, the president of Tajikistan named a working group to prepare a **Poverty Reduction Strategy Paper** (PRSP), in conjunction with government efforts to improve the living standards of the population and solve social/economic problems. A draft PRSP was prepared by October 2000. This document was discussed with international organization and further elaborated during 2000-03. International organizations who participated in the process included the International Monetary Fund (IMF), World Bank (WB), Asian Development Bank (ADB) and UN Development Program (UNDP), among others.

The PRSP was approved in June 2002 by the Parliament of the Republic, which laid down measures for mitigating poverty. The document mentions the importance of obtaining relevant and reliable statistical data for the monitoring and assessment of the strategy and for successful implementation. Monitoring and evaluation, based primarily on statistical data, were to constitute key elements of the strategy, which will enable policymakers to:

- Follow progress and measure the extent to which objectives are being met during implementation;
- Identify current problems and ways to solve them;
- Update objectives at each stage of implementation.

Second, to provide a basis for the monitoring of **Millennium Development Goals** (MDG), the State Statistic Committee or Goskomstat (GKS) is co-operating with interested public institutions, as well as with international agencies (UNDP, UN, WB). The first MDG report was prepared in cooperation with GKS in 2003.

Third, GKS in 2004 started preparatory work to participate in the **General Data Dissemination Standards** (GDDS) of the IMF, after the IMF reviewed GKS data and prepared the Report on Observing the Standards and Codes (ROSC).

Authorized agencies that are responsible for the corresponding GDDS indicators are:
1. GKS (system coordinator in the Republic of Tajikistan)
2. Ministry of Finance
3. National Bank of Tajikistan

These agencies prepared metadata for the GDDS indicators and in August 2004 delivered a draft of the metadata to the Director of the IMF Statistics Department, together with an application for Tajikistan to join the GDDS.

1.2 Summary of government's statistical development strategy

On September 9, 1991, Tajikistan declared independence and became a full member of the United Nations. Since that time GKS has moved in stages to adopt standard international statistical meth-

odologies and remove old command-administrative management structures. This transition has posed a major challenge for GKS. For many decades prior to independence, statistics simply operated to trace the implementation of the government's economic plan. The social and economic reforms of recent years have changed the environment in which the statistics must function. A system is now needed for collecting economic information based on structured methods used in countries with a market economy. As a result, statistical offices at all levels have been obliged to reform the system of collecting and processing data and delivering it to users.

Such considerations led to the adoption on 15 May 1997 of the basic Law "On State Statistics," amended on 22 April 2003. Under it, GKS became fully responsible for managing statistics at all levels of the economy. It is in charge of a unified and organized system for collecting, processing and analyzing statistical data. Each year GKS submits a statistical work plan to the Government for consideration and approval.

During 1995-98, a special inter-agency republican task force examined ways to improve the statistical reporting system while a commission of specialists systematically examined all reporting forms and indicators. The commission also considered recommendations of the UN, the Statistical Committee of the Confederation of Independent States (CIS) and Eurostat. It decided on improvements to the system, taking into account international standards and the requirements of a market economy.

In specifying the new statistical program, an important role was played by the Government's program of economic reforms, as approved for 1998-2001 and for 2000-03. Some essential steps forward were taken in adapting to the new social–economic conditions of the country and to international standards, steps that are summarized in section 2.5.1.

In 2000, GKS announced a 3-year "Integrated Reform Program" for statistics, coincident with the Government's 3-year plan of economic reform. The Government approved the program. The preface to the program document summarized GKS aspirations, including:

- Raising staff qualifications
- Application of modern technology in the collection and processing of data
- Application of modern sampling methods
- Broad use of scientifically-based statistical methodologies for estimates and calculations
- Documentation of meta-data for the public

Most of the 79 tasks in the plan were fulfilled. Not fulfilled were ones for which donor funding was needed but could not be obtained on time. These included, notably:

- Implementation of the new classifications, especially for activities and commodities
- A labor force survey
- A survey of energy usage in establishments
- Automation of manual reports

At present, GKS staff are in broad agreement on the following priority needs:

- To learn contemporary international methodologies for a broad range of statistical tasks
- To acquire modern computing equipment
- To automate the preparation of tables and reports

1.3 Past and ongoing donor assistance in statistics

Since Independence, GKS has received external assistance from three donors.

A. **Eurostat**

1. Shortly after Independence, the TACIS program of Eurostat provided support to GKS with their international program of 1993- 1994. The first phase consisted of two basic components: technical assistance and education.

The TACIS project was designed to provide 200,000 ECU. The project focused mainly on consulting activities, statistical issues as well as the following sectors: register of enterprise, statistics of enterprises and statistics of external trade.

TACIS provided help in upgrading the enterprise register, including the register questionnaire (card), and in drawing samples for surveys. During the first phase of the project TACIS funds were used to implement pilot sample surveys on enterprise statistics, introduce international nomenclature and improve data quality on external trade statistics. In addition, TACIS signed an agreement with the Customs Department regarding delivery of data on external trade. During this period, 30,000 ECU was spent on computers.

For training, a series of courses was conducted as well as seminars and consultancies regarding various types of statistics. In 1997 GKS published "Tajikistan in Figures – 1996" in Russian and English.

2. In March 1999, Eurostat agreed to renew TACIS assistance for 250,000 euros, in the framework of "statistics-3." The program for assistance was entitled: "Reforms in the Sector of Official Statistics of the Republic of Tajikistan." GKS proposed the following issues for priority consideration in a letter to Eurostat in April 1999:

- Register of enterprises
- Enterprise statistics
- Statistics of external trade
- Publication and dissemination of statistical data
- Price index for construction

During this phase, equipment valued at 30,607 euros was purchased. Results were as follows:

a) A classification system for economic activity was elaborated to harmonize with international systems and was implemented for the register. On December 8 1998, the Government adopted regulation #496 on "Ratification of Classification and of Re- registration of Establishments in the Republic of Tajikistan". A new version of register software was created which supported the re-registration of enterprises and organizations. GKS was thus able to update the register and conform it to the new classification system.

b) Reporting of export and import commodities by country of origin and destination was implemented based on mirror statistics, for comparison with national statistics. In addition, annual indexes of unit price and physical volume for export and import commodities were computed, based on a consistent classification.

c) In agreement with international standards, GKS conducted sample surveys of private economic activity to determine the volume of production.

d) Conjuncture surveys were implemented for industrial enterprises and construction contractors to observe cyclical fluctuations as well qualitative indicators of changes in business conditions during the transition period.

e) A methodology and set of procedures was implemented for a price index in construction. This included a list of sample enterprises and a questionnaire. A pilot survey was conducted at 120 construction establishments during March 2001. Unfortunately, the method has not yet yielded a usable result.

f) Several courses, seminars and consultations were given for various sectors of statistics.

g) "Tajikistan in Facts and Figures-1998" and "Tajikistan in Figures-2000" were published in both Russian and English. Results of the population census of year 2000 were also published.

h) MCC specialists attended a seminar on local area networks (LAN) in Kazakhstan. In addition, equipment was provided to set up a LAN at GKS headquarters, to which 52 computers are now connected. However, the usefulness of the LAN has been limited in recent years by its increasing slowness.

TACIS 3 was completed by December 2001.

3. In July 2003, a Eurostat mission visited Tajikistan to get acquainted with its statistics system for the first time. During the visit, past, present and future cooperation was discussed as well as the elaboration of components for the project statistics-8, priorities for statistics-9 (budget 2003), and possibilities for statistics-10 (budget 2004). Eurostat subsequently confirmed the availability of 300,000 Euro for statistics-8.

B. World Bank

1. In 1999, GKS conducted a survey of living standards at a sample of 2000 households. For this, the World Bank and UNDP provided $150,000 plus the work of an international consultant for one month. The consultant taught GKS specialists to implement and analyze the survey. Five computers were purchased out of the budget.

2. In 2003, GKS conducted a second survey of living standards at 4160 households. The World Bank provided $132,000 for the cost of the survey plus help from an international consultant for one month to teach the GKS specialists how to implement and analyze such surveys. Eight computers and a copy machine were purchased out of the budget.

3. In 2003 a proposal to finance the "Strengthening of national statistics program" was developed by the World Bank. These funds ($353,000) are provided from a trust fund. Tasks include:

   a   Institutional and statistical diagnoses, preparation of strategic plan (the present report);
   b. Strengthening of the system of national accounts;
   c. Surveys for tracing expenses in health and education sectors;
   d. Conducting a household labor force survey for the first time;
   e. Equipment- $69,000, including 2 risographs, 2 servers, 20 computers and several hubs.

C. Asian Development Bank (ADB)

In 2002, GKS conducted a survey of poverty indicators including household assets at 6000 households. The ADB provided $360,000 for survey costs, including help from an international consultant for three missions to teach GKS specialists how to implement and analyze such surveys. GKS received 6 computers out of the budget. In addition to the ADB, the IMF and WB participated in the training.

A lesson learned from previous assistance is the need for a more systematic approach, as in the MISP, instead of the piecemeal approach used up to now.

1.4 Description of the Process of preparing the MISP

The process for preparing the Multi-year Integrated Statistical Program (MISP) started in June 2004. Proposed tasks were based on IMF recommendations (ROSC), recommendations of other consultants (especially Aleksei Ponamarenko and Jozef Olenski) and wide consultation with subject matter units in GKS, who each submitted written statements concerning future needs. Selection of priority tasks was largely based on the three broad goals specified in the PARIS21 framework – that is, macroeconomic monitoring, monitoring of poverty, and other data priorities in the framework of the IMF's General Data Dissemination Standards.

A small working group (WG) was created in late June 2004 by the GKS chairman, with five members, to review and document the current situation, identify priorities, and shape the required action plan. Members of the WG have participated in the examination and finalizing of the MISP project. Broader issues were also discussed at length at a 4-day Seminar at GKS during 17-20 Aug. Consideration was also given to needs mentioned by the Ministry of Economics and Trade, the Ministry of Finance, and the National Bank, who attended the 4-day seminar.

It was decided to prepare an action plan at a high level of detail, to facilitate subsequent managerial review and the preparation of terms of reference. During the development of the plan, GKS benefited from the mission reports of foreign experts who have visited GKS previously. Russian-language materials prepared for the MISP have been collected and provided to GKS on a CD-ROM, for subsequent use in interpreting the report. This includes detailed cost estimates for some large budget items, such as equipment purchases and building renovation.

2. Evaluation of the current statistical system

2.1. Statistical legislation and the degree of the system's independence

Official statistics are based on the Law "About State Statistics," passed on May 15, 1997, and the Law of April, 22, 2003 containing modifications and additions to the 1997 Law.

The Law defines the legal and economic basis of the State Statistical Committee or Goskomstat (GKS) and regulates legal relations connected with the gathering, processing, analysis, distribution, use and storage of statistical information. The Law further stipulates that the state creates a uniform system of primary account and statistics, manages them, and defines the character of statistical activity throughout the Republic.

On January, 11, 2001 the President of the Republic signed the Decree "About the Formation of the State Statistical Committee of the Republic of Tajikistan." On February, 14 2001, he signed

Regulation No 74 "Questions about the State Statistical Committee of the Republic of Tajikistan." Besides the above-mentioned Law, GKS is also is guided by the laws "About the Population Census" and "About the State Registers" as well as by the Constitution of the Republic.

The Law stipulated that one of the main principles of government statistics is the "objectivity, reliability, and independence of statistical information."

Coordination of international cooperation is carried out by the Chairman and also by heads of international projects. This includes communication with all international organizations and foreign statistical services.

Confidentiality

The Law also defines the accountability of statistical offices for observing the confidentiality of data and trade secrets and other provisions of the Law. Statistical offices are obliged to secure the confidentiality of individual data for persons and establishments obtained as a result of statistical surveys. Thus the data received from individuals and establishments can be announced only with their consent. Data containing state or trade secrets are not subject to announcement and are protected under the laws of the Republic. Users of statistical information do not have the right without GKS consent to publish or distribute the received information.

In practice, however, it is difficult for GKS to ensure the confidentiality of enterprise data, because other laws provide access for judicial and control institutions to primary statistical data. Moreover, central and local public bodies continually and persistently request the provision of individual statistical data.

Primary aims and principles of state statistics.

The primary goals of state statistics in Tajikistan are:
- development of scientifically-based statistical methodologies ensuring comparability of data according to international standards;
- gathering, processing, analysis and publication of statistical data describing social and economic development;
- oversight over statistical activity in other agencies;
- simultaneous transmission of statistical data to government organs and all other users;
- International cooperation.

The main principles of the state statistics are:

- objectivity, reliability, independence and integrity of the statistical information;
- timely collection of data , stability of the system of indicators;
- comparability of the main indicator with statistics of other CIS states and with international statistics;
- availability and openness of statistical information within the limits established by law.

2.2 System overview: the main agencies producing data

The statistical system of Tajikistan is centralized and is made up of GKS as the leading agency, responsible for the organization of official statistics, as well as of other agencies (Ministry of

Health, Ministry of Education, etc.) that produce statistical information, which they send to the Main Computing Center (MCC). The National Bank has a special status as an agency which publishes its own statistical information.

2.2.1 The State Statistical Committee (Goskomstat)

GKS and the statistical offices subordinated to it together make up the statistics system, governed by the Law "About State Statistics." It includes the headquarters of GKS, regional statistical offices, the MCC, and an Educational Center that was destroyed during the civil war and now exists only on paper. The headquarters of GKS consists of the administration including the chairman of GKS, 3 deputies, one department (for methodology), 12 subject matter divisions, and 3 support divisions.

MCC is an independent organization in financial, personnel and organizational questions that carries out the collection, compilation, processing, transfer and storage of statistical data. In principle, it carries out its work using modern technologies for computing and communication. In practice, many of its reports are prepared manually. Its ability to carry out programming tasks on a broad scale is limited by the use of older programs and the lack of funds for staff incentives.

For peer review and oversight of issues that arise in connection with the performance of duties assigned to GKS and its regional organs, a board of seven persons has been established. Named by the President of the Republic, its members include the GKS chairman, his deputies, the head of the MCC, one division head from GKS, and the head of the statistical office for Khatlon oblast. Similar oversight committees exist in each oblast. GKS is responsible for overseeing cooperation among divisions during preparation of statistical indicators and survey methodologies

Regional offices

Rayon statistical offices (68 in number) collect primary data from the reporting units, carry out aggregation and pass aggregated summaries (svody) to oblasts. Oblasts carry out further aggregation and send summaries to the MCC and to local public authorities (except for the few surveys that are processed directly by MCC). They also provide summaries and analyses to regional governments. Although they mostly work on the GKS program, local government pays their salary and rarely provides funds for visits to GKS in Dushanbe. This arrangement leads to conflicts; accordingly, regional leaders have asked GKS to pay salaries directly from the central budget.

Programs of statistical tasks

The work program for statistical surveys covers all spheres of statistical activity including statistics of finance, national income statistics, statistics of housing and communal services, transport, communication, paid services to the population, environmental protections, social statistics, statistics of labor and employment, statistics of construction materials and energy use, statistics of trade, statistics of foreign economic relations, statistics of industry and technical progress, statistics of capital construction, statistics on agriculture and statistics of prices and real incomes of the population.

Compulsory reporting forms account for the bulk of information collected and processed by GKS, but sample surveys also play an important role, as shown by tables 1 and 2.

1. The distribution of compulsory forms by periodicity and subject area

	Area	Total forms	Of which:			
			Annual	Quarterly	Monthly	Other
1.	Population statistics	**5**	1	1	2	1
2.	Industrial statistics	**21**	13	-	4	4
3.	Statistics on investments and construction	**12**	7	1	3	1
4.	Statistics on agriculture, forestry and environment	**35**	6	8	9	12
5.	Statistics on transport, communications, informatics and tourism	**17**	13	-	3	1
6.	Statistics on trade and services	**34**	6	9	6	13
7.	Financial Statistics	**26**	10	10	-	6
8.	Labour force statistics	**32**	20	7	4	1
9.	Price statistics	**28**	5	4	19	-
10.	Social Statistics	**13**	13	-	-	-
11.	Registers, statistical classifications and structural survey	**1**	-	1	-	-
	Total	**224**	**94**	**41**	**50**	**39**

2. The distribution of forms for sample surveys, by periodicity and subject area

	Area	Total forms	Of which:			
			Annual	Semi-An	Quarterly	Monthly
1.	Population statistics	**-**	-	-	-	-
2.	Industrial statistics	**2**	-	-	2	-
3.	Statistics on investments and construction	**2**	2	-	-	-
4.	Statistics on agriculture, forestry and environment	**3**	3	-	-	-
5.	Statistics on transport, communications, informatics and tourism	**4**	2	-	2	-
6.	Statistics on trade and services	**26**	-	26	-	-
7.	Financial Statistics	**-**	-	-	-	-
8.	Labour force statistics	**-**	-	-	-	-
9.	Price statistics	**3**	1	-	1	1
10.	Social Statistics	**1**	1	-	-	-
11.	Registers, statistical classifications and structural survey	**-**	-	-	-	-
	Total	**41**	**9**	**26**	**5**	**1**

When the number of respondents is examined instead of the number of forms, it is seen that the number of sample survey forms processed is surprisingly large, a fact that can be attributed to the use of inefficient samples.

3. Establishments or persons covered by compulsory forms in 2002, by subject area

	Area	Periodicity:		
		Monthly	Quarterly	Annual
1.	Industrial statistics	575	752	1312
	Energy balances	-	-	-
2.	Statistics on agriculture and forestry	7948	3543	11491
3.	Environmental statistics	-	-	468
4.	Statistics on investments and constructions	1570	470	4193
5.	Statistics on transport	280	201	4899
6.	Statistics on communications and informatics	-	-	-
7.	Statistics on tourism	-	-	-
8.	Statistics on trade and services:	5299	1660	12672
	- Retail sale of goods			
	- Paid services provided to population			
	- Export of services - Import of services			
9.	Financial Statistics	-	2174	3062
10.	Labour force statistics	14983	16306	14983
11.	Social Statistics	-	-	4771
12.	Demographic Statistics	-	-	-
13.	Registers, statistical classifiers and structural questionnaires (annual statistical questionnaires in enterprises)	-	175	

4. Establishments/persons covered by sample surveys, '04

Sector	Number of respondents			
	Monthly	Quarterly	Semi-Annual	Annual
Industry		13,500		
Construction, investment		1400		
Agriculture				75,000
Transport, services		900		14,000
Trade			42,000	
Prices	4000			
Household budget survey	925			

State Register of Enterprises and Organizations

According to the Law "About the State Registers " GKS is charged with maintaining the State Register for Enterprises and Organizations (SREO) which also includes branch establishments. SREO was created in 1992 on the basis of a Soviet proto-register called the All-Union Classif-ication of Enterprises and Organizations. SREO identifies all of the formal economic activities located on the territory of the Republic: the so-called 'legal persons,' including enterprises and organizations, public associations, registered farmers and individual businessmen as well as branch establishments of enterprises or other 'legal persons.' All these units are included in the register with unique identification codes, which are obligatory for all establishments, government

agencies, individuals proprietors and self-employed persons. Despite, the law, however, some who should register fail to do so.

The register has administrative as well as statistical functions. It includes administrative data such as names and addresses of units and other data. In 1992, the register included 7,000 units but it now includes more than 29,000 active units as a result of the expansion of its scope of coverage to include individual proprietors (in 2000) as well as growth in the number of units.

The MCC manages the register at the national level, while regional divisions manage it at the regional level. Statistical offices are expected to update the register at least once a year, on the basis of responses to compulsory reports and other information. Unfortunately, however, a precise and transparent procedure for this purpose is lacking. In principle, the register provides a suitable frame for sample surveys, together with useful data on the number of entries and exits from year to year. In reality, despite re-registration in 1998, the register suffers from certain known weaknesses that limit its reliability. As in many other countries, some enterprises do not register and some are registered more than once, while yet others were registered long ago and may no longer be active or may have shifted from one kind of activity to another.

In agriculture, for example, it is believed that approximately one-third of the so-called dekhan farmers (individual farmers who use hired labor) are not in the register.

2.2.2 Other agencies responsible for the production of statistical and administrative data

The National Bank of Tajikistan is responsible for the preparation of the balance of payments and banking and monetary statistics. The bank began to publish a monthly statistical bulletin in 1997. The bulletin appears in two versions, in Russian and Tajik. The bank intended during late 2004 to begin publishing a new version in three languages: English, Russian and Tajik.

The Balance of Payments division has 8 employees Balance of payments data is used in national accounts division of GKS to prepare accounts for "the rest of the world." For the preparation of the balance of payments, GKS provides the National Bank with various statistical information (on foreign trade, foreign investment, etc). A major weak point in the source data is considered to be statistics on remittances by emigrants and migratory workers, an important factor in the balance of payments, inasmuch as many citizens of Tajikistan have migrated to Russia and elsewhere in search of higher wages. A Labor Force Survey (now under way for the first time) is expected to provide the data.

The Division for Monetary and Financial Statistics has 6 employees. It collects data from the banking system regularly on a clear legal basis. The bank began its monetary survey in 1995.

The Ministry of Finance provides budget data to GKS. It provides monthly data to GKS on the national budget execution and quarterly data on regional budget execution. GKS uses the data in the preparation of estimates for expenditures for "Public administration" and as input for other parts of the national accounts. In practice, however, GKS has not always been able promptly to obtain data in sufficient detail on a quarterly basis.

The Ministry of Government Income and Taxes includes the Customs Department and the Tax Department. **The Customs Department** (CD) prepares monthly data on imports and exports on the basis of the customs declarations, thus providing a basis for the preparation of statistics on

external trade. **The Tax Department** provides data on the incomes of self-employed persons as well as data on small, unregistered establishments for register updating.
The Ministry of Transport collects data on public roads and bridges.

The Ministry of Communications collects data on postal and telecommunication activities.

The Ministry of Health provides annual, general information on the number of doctors of all specialties, other medical personnel, the number of beds in hospitals and clinics, patients at clinics, infectious diseases and morbidity. In addition, the Ministry has reportedly carried out household surveys of health. However, no data has been published, and GKS has been unable to view the results or obtain particulars from the Ministry.

The Ministry of Education provides data on the number of students and teachers in state schools and pre-schools, as well as on enrolment rates and school attendance. GKS collects data from other schools.

The Ministry of Labor and Social Protection provides data on the number of pensioners and invalids and the average monthly pension payment. **The Employment Agency** of the Ministry provides information on registered unemployment.

The Ministry of the Internal Affairs provides data on vehicle use by all sectors, railway accidents, and reported crime. Its **Passport Office** provides data on internal migration.

The Office of Vital Registration in the Ministry of Justice provides information on births, deaths, marriages, and divorces.

The Ministry of Environment submits data on national parks and protected lands.

The State Civil Aviation Administration prepares data on air transport of goods and passengers and financial activity of civil aviation.

The Tajik railway submits data on the volume of transportation of cargo and passengers, and financial activity.

The Committee on Land Measurement provides survey information on the area of lands, including agricultural land, divided by utilisation categories and territorial profile.

2.3 Mechanisms for the coordination of statistical activities

2.3.1 Mechanisms for the coordination among providers
GKS is charged with the coordination of statistical activities and with the collection of official data under the Law of Statistics. According to the Law, GKS approves methods of statistical surveys/reviews and corresponding instruments (questionnaires and report formats).

Each year, GKS coordinates the preparation of a work program, which is agreed with other Ministries and approved by the Government. GKS normally proposes the program in September and the Government approves in December. The programs mandate the collection of all primary data and mentions activities by economic sector, with schedules for each activity.

A Methodological Council consisting of representatives from main GKS divisions and 4 representatives of the oblasts was launched in April 2002. The council has quarterly planning sessions to discuss issues like:
1. development of statistics
2. improvement of methods for data collection and data processing
3. improvement of questionnaires and explanatory notes
4. introduction of new classifications

The 7-member board, discussed above, reviews each quarter the work of statistic bodies, as well as personnel matters and training. In special cases it examines matters in more depth. Nobody from any other agency participates in any formal council for coordinating statistical activity.

Based on experience with the statistical reform program for 2000-03 (discussed in section 1.3), a long-term plan is needed, such as the MISP, to ensure future improvement. Such a plan should not only enumerate the main tasks for the future, but should also specify requirements in terms of: computer equipment, consultants, and changes in GKS staffing. Moreover, the plan should also examine ways to reduce the burden of unnecessary work and to shift personnel and other resources from older tasks to newer ones, coordinated with interested ministries and agencies.

2.3.2 Mechanisms for the promotion of consultations between users and providers

GKS has two roles in statistics: as user (of statistical and administrative data produced and presented by other institutions) and provider of statistical information. Coordination of the activity of the statistic offices and consultations between GKS and other data users in the public sector are performed by the processes indicated in section 2.3.1.

GKS tries continually to improve communication with different groups of users and with the public at large. Activities in this respect are aimed at establishing better communications with print and broadcast media, including six publishing and broadcasting agencies. Parts of some radio and TV programs are specially prepared together with GKS. The goal is to increase awareness of statistical issues and inform the public at large about the social and economic development of the country. As previously mentioned, no formal forum yet exists for obtaining feedback from data users. No survey has ever been taken to ascertain user views and needs.

2.4 Appropriateness of resources and institutional effectiveness

2.4.1 Appropriateness of resources

The headquarters offices of GKS and the MCC are financed by the state budget in accordance with the approved program of statistical tasks. Regional statistics offices are financed by the budgets of regional governments. Expenses for 2003-04 for the maintenance of the national statistics system (including the census) are shown in table 5.

The share of the statistics budget in the general budget and in GDP is presented in table 6. The GKS budget – equal to $545,000 for 2004 -- is a bit small in relation to the average for statistics in low-income countries with fewer than 10 million population -- $630,000 – and even smaller in relation to the recommended budget for such countries -- $1.25 million. GKS receives income from sale of its publications and other services; amounting to some 12,000 somoni ($4,000) last year. GKS uses these funds to supplement staff salaries with a small daily food allowance.

5. Expenses for financing of statistics for 2003 – 2004 from the state budget

(in thousand somonis)

	2003 Actual				2004 Planned			
	GKS	MCC	Regions*	Total	GKS	MCC	Regions*	Total
Wages	61.5	102.2	321.2	484.9	80.2	190	321.2	591.4
Materials	11.2	140	146	297.2	13	277.4	146	436.4
Other current expenses	54.5	142		196.5	59.9	183.8		243.7
Construction				0	90		110	200
Repairs					15	40		55
Cars, computers, equipment		61.7	25	86.7	10	72.8	25	107.8
TOTAL	127.2	445.9	492.2	1065.3	268.1	764	602.2	1634.3

* Estimated for the regions, except for construction costs. Budget for regional statistical offices is documen-ted at the regional level but not at the national level. On the basis of budget for a single oblast and its rayons, expenditures were estimated per employee. This figure was prorated over the entire country.

6. GKS expenses in relation to the state budget and the GDP

	2003	2004 Plan
1. Total expenses for official statistics, thous. somoni	1065.3	1634
- thousands USD*	355.1	543
2. GDP (mil. Som.)	4757,8	6454.9
3. Total state budget (million som)	772,3	942.8
5. Total expenses for official statistics (except population census), in % compared to the:		
- GDP	0,022	0,025
- state budget	0,14	0,17
- exchange rate of 1 USD	3.0607	3.01

Resources from the state budget are insufficient to modernize information technologies, upgrade methodologies and implement new surveys. Mostly, GKS has to rely on the help of international donors in solving these problems. The effective functioning of a statistical office is impossible without modern information technologies and computer equipment. Information technology is rapidly advancing and providing new solutions for old problems. GKS needs to study these technologies and adopt the most useful ones for its own needs.

Changes in ownership of the means of production and the appearance of a large number of enter-prises and organizations of different forms places demands on statistics offices. Modern access to statistical information from such diverse units requires reliable, efficient and quality communica-tions. That is why GKS needs modern telecommunication technologies for the collection, storage, processing and delivery of statistical data. This will accelerate the analysis and transfer of data as well as support an improvement in data quality.

History of MCC

Set up in 1960, MCC was soon equipped with mainframe computers and came to have a large staff in the 1980's, upwards of 630 persons in 1990. In addition to processing statistics for Tajik-istan, it undertook programming and processing tasks on contract for agencies in Moscow and Leningrad.   After independence, however, the MCC was hit by a convergence of two crises. On the one hand, it found itself invested in an outmoded technology (mainframes) and without re-

sources to invest in the new technology (PC's and new types of programs). On the other hand, independence, civil war, and the severe drop in the real wages of government workers led to an exodus of skilled workers from MCC, many of whom were from Russia. At present, MCC finds itself poorly equipped with the equipment and skills needed to modernize data processing.

7. The number of PCs in statistical offices as of August 2004

	Total	Frequency of the processor:				Number of computers per worker
		<= 486	<= 200 MHz Pentium I	0,2 - 1 GHz Pentium II, III	> 1GHz Pentium IV	
GKS HQ	**50**		14	26	10	0,55
Main Computer Center	**62**		23	29	10	0,38
Dushanbe city	**15**		4	10	1	0,27
Khatlon oblast	**39**		2	37	-	0,18
Sogd oblast	**53**		50	3	-	0,27
GBA Oblast	**7**		4	2	1	0,14
Rayons of Republican Subordination (RRP)	**13**		9	4	-	0,19
Total	**239**		**106**	**111**	**22**	**0,29**

Existing technical bases of GKS

The information system of GKS and the MCC is characterized by a decentralized architecture with a low degree of automation. The availability of computers is shown in table 7. There are only 239 computers and 110 printers in all parts of the statistical system. Most of the equipment mentioned above is out–of-date. A network at headquarters serves 52 computers, but the connection has become slow and is not much used by most of the linked computers.

PC's were gradually introduced into GKS. MCC used Soviet models to enter data for the 1989 census. Modern PC's first appeared in very small numbers in 1991; further progress was halted by the civil war. GKS got a few more PC's from Eurostat in 1995. In connection with the 2000 census international. agencies gave 30 PC's in 1998. The government bought 50 PC's for the census from census budget in one lot, and in general is said to have paid for about 140 of the 239 computers now in use in statistical offices.

Under existing arrangements, rayon offices collect primary data from respondents, prepare summaries manually, and send the summaries to the next higher level either in written form or via telephone. Most rayon send their results to an oblast office, but 13 rayon (of 'Republican subordination') send them directly to GKS. Oblast offices prepare manual summaries of data from the rayon and transfers the summaries to MCC via teletype or by post or occasionally by courier, but this is costly. Only rarely is primary data sent to MCC for data entry and creation of a database. For most surveys, no database exists.

Existing equipment for data transfer and communication does not provide modern transfer rates for data. The poor quality of telephone lines in rayon contributes to additional delays in data delivery, by hindering the use of fax or modem. An email connection has been installed in Sogd Oblast and some data has been transferred from there by email

At this time there are 237 statistical forms in the State Statistics Committee (i.e., more than the 224 itemized in table 1) and only 10% of them are automated (prepared by computer). Approximately 200 regular reports are produced at MCC by means of manual tabulations. Progress on automating the work has been slow, due to the lack of qualified and properly

motivated computer programmers. The automated tabulations that have been prepared are largely in FoxPro and Clipper.

2.4.2 Management, including human resource management

Staff working in the statistical system number 800, of which 83 work at GKS headquarters, 135 work in MCC, and 578 work in oblast and rayon offices. Another 25 positions (20 in the regions) are vacant. See table 8 for details.

8. Staff by level of training and work experience

	Total Employees	Of which: Specialists	Of which according to the level of training:			Note: Seniority > 10 years
			Superior	Vocational	No special studies	
Goskomstat	83	75	68	7	-	35
in %	100,0	90,3	90,6	9,3		50,1
Main Computer Center	135	101	58	24	19	25
in %	100,0	74,8	57,4	24,5	18,8	25,5
Of which specialists in IT	4	4	4	-	-	-
in %	100	100	100			
Regions	578	421	195	96	130	258
in %	100,0	72,2	46,3	22,8	30,8	61,3
Total	**800**	597	321	127	149	318
in %	**100,0**	74,6	53,7	21,3	24,9	41,6

Longstanding problems include:
- Extremely low salary levels (far less then what is paid in the private sector). For this reason, there is a lack of highly qualified specialists, especially in IT.
- The existing salary system does not allow for raises or merit bonuses and this prevents highly qualified people from applying.
- Financial constraints do not allow GKS to organize systematic and regular classes for staff education. The lack of English skills hinders the study of statistical methodology.

Government policy is not to increase the number of civil servants. GKS believes it can fulfill its tasks without an overall increase in staff (except, perhaps, a temporary increase during the MISP). Nevertheless, GKS plans to increase staff in the leading divisions – those that face the major tasks under the MISP. This will pose the problem of how to compensate for such an increase with small percentage decreases in the MCC and in regional statistical offices.

2.4.3 Dissemination and publication policy

Dissemination of statistical information is in accordance with the Statistics Law and Regulation No. 74. GKS, in accordance with its work program, sends a catalogue with publication dates and volumes and services to

- Presidential office;
- Parliament;
- Government;
- Ministries and agencies;
- Mass media;
- International organizations;

The publishing department is located in the MCC. It puts out about 80 printed publications each year: 30 -annually, 20- quarterly, 30- monthly. GKS has a library, which does not function for lack of staff.   The combined number of copies for all publications runs to only 3000 per year. Data is disseminated without charge to state agencies. Though most services are free, entrepreneurs are charged for some information and services. In recent years, GKS has made efforts to improve data dissemination, especially by improving the content and format of publications.

In order to expand information exchange among internal and external users GKS has created a Web-site, with data for all sectors of the economy. The address is:

Web-site:http: // www.stat.tj/   E-mail: stat@tojikiston.com

The MCC is in charge of printing and distribution of publications, which are prepared by the various divisions of GKS. The monthly report, the yearbook, and publications in English like "Tajikistan in Figures," are prepared in the Division of Economic Analysis and International Relations, using Word and Excel.

2.4.4 Views of users from the public and private sectors

Many data users in Tajikistan confuse the notions of "statistics" with "bookkeeping," and fail to understand that official statistical data represent a public good, which does not come for free, as its collection requires financial and human resources. As a result, requests and exigencies towards statistics are very high and unrealistic under existing conditions. As previously mentioned, GKS has never elicited feedback by way of formal mechanisms like user groups or surveys, so that it does not yet have a clear picture of user views.

2.5 Data quality and standards

2.5.1 Methodological soundness, the level of conformity with international standards

1. At independence, national accounting in Tajikistan was based on the Material Product System, standard for the USSR. In 1994-95, efforts began to implement the System of National Accounts, United Nations methodology, version 1993. Annual SNA data are now available for 1991- 2003.
2. The Consumer and Producer Price Indexes were first implemented in 1992, based on IMF methodology, providing a monthly indicator of inflation.
3. A series of statistical investigations and calculations in the framework of the International Comparability Program, rounds 1996, 2000 and 2004, have been organised. This allowed the calculation of Purchasing Power Parity of the Tajikistan currency, the somoni.
4. External trade statistics have been developed, based on Harmonized System (HS) classification and on data from Custom declarations.
5. A monthly Household Budget Survey was launched in 2000, using a methodology recommended by the CIS Statistical Committee.
6. A Labour Force Survey (LFS) was launched in 2004, providing data on the number and structure of the active and inactive population, employment, unemployment and labor migration.
7. A national register of enterprises and establishments was created in 1992 to serve as the basic instrument for the organisation of statistical surveys. It was later expanded to include individual proprietors, so that it now includes all units with the status of economically active, legal persons.
 8. In order to ensure the consistency the national statistical system with international requirements, new statistical classifications are needed. The General Classification of Types of Economic Activities of Tajikistan, based on ISIC, has already been developed, but has as yet been implemented only for the register.

9. Monthly and annual surveys of production by farm families and by private own- account workers have been conducted.
10. Many computers were installed and the content of publications was improved.

2.5.2 The current situation by statistical domains

National accounts
Data for the system of national accounts system (SNA), based on UN methodology, were first published in 1997. The accounts are prepared for economic activities, expenditures, and institutional sectors. Quarterly GDP and gross regional product have not yet been prepared. The gross domestic product is adjusted using estimates for the informal economy, which are in the process of being raised from 21 to 32-34 percent. The calculations are performed in accordance with international standards (SNA, UN-1993, "Recommendations on the estimation of the informal economy," OECD 2002).

Price statistics
Based on a representative sample, consumer prices are reported for Dushanbe and 3 oblasts. Sample surveys comprise more than 3000 outlets for more than 600 products and services. Operations for the monitoring of prices in the survey sample are developed by the regional statistics offices, and are carried out manually on paper, on the basis of monthly observations.

Producer prices are collected only for industry, at 1000 outlets for more than 400 industrial goods but not for agriculture goods or construction materials. International classifications have not yet been applied for either producer or consumer prices.

The recording and calculation of average prices for each product or service is performed manually, and similarly for relative price indicators for each group of products or services. The data are transmitted to headquarters by post or courier, or, in the case of one oblast, by email.

The preparation of regional and national price indicators is carried out at GKS using its own software package, which lacks some of the more sophisticated options required for calculating CPI and PPI. Seasonal adjustment is not carried out.

Statistical investigations and calculations under the International Comparability Program of 1996, 2000 and 2004 helped calculate the Purchasing Power Parity of the Tajik somoni.

Register of enterprises and establishments
Nearly half of the 29,000 active units in the register are farms. Steps have been taken in recent years to update the register more promptly. In 2001, GKS began to identify enterprises and establishments that were no longer active, based on the fact that they stopped responding to inquiries and could no longer be found; about 2,000 such units have been identified (in addition to another 2000 that have been legally liquidated). In 2004, GKS began a supplementary procedure for updating its register for new establishments that did not register with GKS but are known to the tax authorities.

Regional staff currently make note of establishments that are no longer active, but this is not yet done in a systematic way. For this and other reasons, it is believed that much data in the register is out of date. A business census is felt to be needed for comprehensive updating of the register.

Industry statistics
This division compiles monthly statistics on industry and a monthly index of industrial production. Individual proprietors are covered by a sample survey.

Construction statistics
Surveys of construction include monthly reports by contractors, by those who have let construction contracts, and by persons who build houses for themselves, as well as quarterly reports on costs and annual reports on unfinished projects.

Transport statistics
GKS collects monthly and annual data on road and railroad transport of goods and passengers, in physical units and in value terms. There are compulsory forms for large enterprises and sample surveys for small ones. However, data for the informal sector are incomplete.

Tourism statistics
No tourism statistics are presently collected but GKS would like to begin.

Agriculture statistics
Agriculture plays an important role in the Tajik economy with a share of 26.5 percent of GDP. Comprehensive production data are collected by means of obligatory monthly and quarterly surveys for the remaining State and collective farms, and from more than 18,000 (dekhan) farmers with paid employees. In addition, an annual sample (10 percent) survey provides data on approximately 750,000 farm families below the dekhan level. The reporting burden is heavy, including even daily reports on the cotton harvest. GKS staff have calculated that during a year the office collects over 4 million reports from agricultural entities.

Division staff are concerned that they miss certain pieces of production with the existing system of surveys because, for example, the number of livestock is understated, some prices are understated and some elements of sharecropping product are omitted from the production measure.

GKS has responsibility for all agricultural statistics. The Ministry of Agriculture has a well developed field presence with agricultural experts, but has no tradition of collecting its own data.

Environment statistics
A limited set of environmental statistics are collected, but GKS would like to upgrade its program. One obstacle is the loss during and after the civil war of monitoring equipment, so that of the 21 stations for monitoring air quality that were operational at Independence, only two now operate.

Statistics on foreign trade in goods
Foreign trade statistics is a new branch in the country's statistics, which began with Independence. A system was set up between 1991 and 1993 for the monitoring of foreign trade in goods and services, based on reports collected from businesses engaged in external trade. The data were not well classified.

During 1994, a transition to manually collected Customs statistics was achieved, enabling the monitoring of about 1000 types of goods with 4-digit categories based on the Harmonised System. The Customs Department collects data from each declaration and prepares summaries for GKS. Monthly, GKS receives tables for 97 commodity groups, with totals and details for 10 major commodities by country. Annually, it receives data for over 900 items at the 4-digit level, by

country. An unfortunate limitation is that GKS receives data only for the value weight (tons) of the goods, but not for numbers, not even for numbers of computers, cars, truck, and airplanes.

The quarterly survey of enterprises engaged in export and import trade has continued, providing a cross-check on the Customs data. It coves more than 200 enterprises. In future, GKS may discontinue this survey, which shows little difference from the Customs data.

GKS calculates annual unit-price indexes based on the data for over 900 items and uses these to prepare constant-price measures of imports and exports. It plans to produce a quarterly index and quarterly constant-price measures as well, providing it can receive quarterly data for over 900 items from the Customs Department.

Mirror data are obtained from Kyrgyzia, Uzbekistan, Kazakhstan, Russia, Belorussia, Moldavia, Azerbaijan, and Georgia and are compared with national Customs data. Such data are regularly exchanged with the aforementioned countries by email. Publications are also exchanged. Once a year full data are sent to the United Nations. Methods are regularly discussed with StatCom of CIS and with Eurostat.

Statistics on foreign trade in services
Starting with 1997, GKS has carried out a quarterly survey on the export and import of services, mainly transport and communications.

Domestic trade statistics
In view of the transition to a market economy, the forms and instructions used for collecting data on domestic trade were reviewed and improved during 1991-96. The number of obligatory forms was not much reduced, but the number of covered establishments was reduced as activity in state-owned enterprises shrunk. In addition, 26 forms were introduced for semi-annual sample surveys, using an extremely large sample – 42,000 – for measuring sales and stocks at retail units and restaurants.

Statistics on Foreign Direct Investment
GKS collects data on foreign direct investment from obligatory reports by 151 joint enterprises.

Statistics on paid services provided to the public
Paid services provided to the public is currently being surveyed, with information obtained from service providers. GKS would like to collect data as well from consumers, who could provide a more comprehensive measure of the cost of paid services.

Finance statistics
GKS carries out statistical surveys of the activity of commercial banks and of enterprises debt

Demographic statistics
A population census was carried out in 2000. Births, deaths, and internal migration are registered with a register office of local government. Each year the data are compiled by GKS and used to prepare estimates of the current population by oblast (but not by rayon).

Infant mortality is believed to be seriously underreported, because many families do not promptly report births, so that if the birth is soon followed by a death neither event is reported. Data from a sample survey would be useful for estimating the extent of underreporting.

Census of Population
While there is no standing group of staff for the Census of Population, it is useful to examine the experience of the previous census. A major bottleneck in the runup to the 2000 Census was the enormous burden of preparing maps manually for all cities and towns, as well as for rural areas. The preparation of maps for a single town took several persons an entire year. For the next census, GKS wishes to upgrade the technology for census mapping.

Labour force statistics
GKS is responsible for all labour statistics. Before 2004, the system was built entirely on data from employers. The main components were:

- Obligatory reporting in the formal sector -- State agencies, large enterprises, and collective farms;
- Tax data on self-employed non-agricultural workers (patenchiki);
- Data on the volume of production in small-scale farm households, from which the number of workers is estimated on the assumption that productivity is the same as in the collective farm sector. This is done for lack of more direct data.

GKS also publishes data on wages in the formal sector and registered unemployed.

In Aug. 2004, GKS began to carry out a labor force survey at 4,000 households, the first ever in Tajikistan. This will provide a more complete picture of employment and unemployment, including labor migration outside of Tajikistan and employment in the nonobserved economy.

Social statistics
To provide data for monitoring poverty, GKS began in 2000 a monthly sample survey at a panel of 925 households, without replacement except for attrition. The questionnaire was based on a standard questionnaire from StatCom CIS, and the sample on a sample design from the USSR and the population census of 1989. GKS would like to upgrade the survey to international standards, as regards the sample, the replacement method, and the questionnaire.

In addition, large scale surveys of living standards were carried out in 1999 (2000 households) and 2003 (4150 households), with World Bank assistance. A survey of assets and other welfare indicators was carried out in 2002 with ADB assistance. Unfortunately, GKS has not been able to publish an official estimate of the population in poverty due to lack of agreement on an official poverty line. Nevertheless, given an assumed poverty line, the aforementioned surveys can be used to calculate poverty rates.

Affluent households pose a different problem. As in many developing and transitional countries, such households in Tajikistan tend to evade coverage in household surveys, so that the databases do not cover the upper end of the income distribution. There is a need to survey such households using special enumerators and methods, in an attempt to gain their trust and obtain reliable data.

Another problem is the lack of poverty indicators by rayon, which are sorely needed inasmuch as poverty incidence varies greatly from place to place. Due to the large number of rayon (68), it would be excessively costly to use a sample survey to estimate poverty rates by rayon. Oblasts, of which there are only 3, are too large to be useful to pinpoint pockets of poverty. However, it would be possible to group rayons into 10 or 15 groups, so that a large sample survey could serve to provide estimates of poverty rates by groups of rayon. Otherwise, there is a need to more fully exploit administrative sources to prepare indicators of poverty by rayon, such as indicators of low enrolment or high incidence of illness or mortality.

Education statistics

The Ministry of Education collects data on school enrolment and school attendance, including data by rayon for primary and secondary schools, for all schools subordinated to it, while other ministries collects data for schools subordinated to them. The MCC obtains secondary data from the ministries and primary date from private schools not subordinated to any ministry.

Health statistics

The Ministry of Health collects administrative data on health care and illnesses, and provides them to GKS for publication. There is also administrative data on access to clean drinking water and to reproductive health care, but GKS would like to collect survey data as well.

2.5.3 Quality awareness

As GKS has never conducted a survey of users, it is not aware of whether users trust or distrust its data. What is clear so far is that the Government trusts the data and considers it very important. GKS is aware that it has paid little attention to data quality issues. During the MISP, GKS plans to elicit feedback from users in more formal and systematic ways than heretofore and to pay more attention to quality issues.

2.5.4 Adherence to professional ethics and international standards

GKS has expressed its commitment to adhere to the UN Fundamental Principles of Official Statistics. There is also a commitment to adapt to international standards, and important progress has been made in this field in recent years.

2.6 Key outputs versus demand

2.6.1 Adequacy for monitoring the macro-economic situation and poverty

For macro-economic management, the existing national accounts data provide the basic tool, one that needs to be elaborated, especially with the preparation of quarterly national accounts and with broader use of deflation methods for constant-price measures.

GKS is directly involved in monitoring implementation of the PRSP and MDG, and for these purposes, has given priority attention to 9 poverty indicators, as follows:

1. Percent of population living below the poverty line
2. Net enrolment ratio in primary education
3. Maternal mortality
4. Child mortality
5. Percent of population having access to reproductive health services
6. The share of the private sector in GDP
7. Percent of population having access to clean drinking water.
8. Activity rate of the population of working age
9. Availability of telephone lines per 100 inhabitants.

Further work is needed on indicators 1, 3, 4, 5 and 7.

The availability of data for monitoring the Implementation of MDG is presented in annex 4. It shows that 15 of the 48 MDG indicators are available annually, 2 once every 10 years (from the census), and 10 occasionally. Not all of the available data are believed to be reliable.

2.6.2. Assessment of relevance and reliability of data

GKS is still in a period of transition between its older functions in support of a planned economy and its newer functions in the context of a market economy. The newer functions require that GKS devote more attention to national accounts and poverty indicators, and to supporting data for the business register, prices and household expenditures. They also require more attention to methodology and economic analysis. Today, 13 years after Independence, despite many steps forward, GKS is still under-invested in the new functions and over-invested in older functions inherited from the Soviet period and in overlarge samples for small farmers and traders.

Reliability issues have much to do with nonresponse, which remains a hidden problem; as it is not normally documented for any GKS survey, nonresponse adjustment is never carried out. Another issue concerns the reliability of primary data, which is not systematically validated. Moreover, economic agents (especially smaller ones) have a tendency to under-declare their earnings to avoid taxes.

3. Outline of strategic development plan

The major strategic objectives for the MISP process *is to upgrade GKS methodological skills and automate its work across the board, while meeting the basic requirements for monitoring the macroeconomic situation and povert, and the other major GDDS objectives.*

The objectives will be reached by applying the following principles (corresponding to the UN Fundamental Principles of Official Statistics):

- To make data available by improved, impartial dissemination
- To improve data reliability
- To ensure the practical relevance of statistical data
- To ensure transparency of methods
- To ensure confidential treatment of data

A higher- level vision for the statistical system can be formulated as:

The system of official statistics in the Republic of Tajikistan shall contribute to the process of economic development and social and democratic reform by providing reliable and relevant information on the problems of society in support of fact-based decisions.

Some important issues to be taken into account for the strategic program are:
1. Lack of understanding of the goals and methods of official statistics, of the differences between statistical information and detailed administrative information;
2. Lack of national experience in statistical methodology and human resource development;
3. Limited GKS resources and capacities for tackling the new tasks and for undertaking fundamental improvements in the IT infrastructure;
4. The need to transfer staff to priority activities within GKS

The first and second issues are an inheritance from the Soviet period. The statistical system was then integrated with the administrative system, which is contrary to the principles for official statistics as formalised in legislation in most countries. Moreover, methodological skills were not developed in Tajikistan, as the task was merely to implement reports and (rarely) surveys designed in Moscow.

To overcome the first problem, actions are also needed to ensure that the confidentiality provisions of the statistics law are applied more strictly, especially in regard to requests from other government agencies (central and local) for access to data for individual respondents. The MISP can help with overcoming the second and third problems, but the fourth will require resolute GKS action early in the life of the plan.

The main priorities for the coming years are:
1. To update and develop the IT infrastructure
2. To automate data capture and implement standard validation methods.
3. To improve dissemination and user contact
4. To improve basic methodological skills, especially in sampling and seasonal adjustment
5. To improve the national accounts
6. To improve poverty data
7. To implement international systems of classification

3.1 Proposals for institutional strengthening

The development of official statistics in Tajikistan requires a fundamental effort to strengthen methodological skills, as well as to build up certain divisions that will play a leading role in collecting priority data – more specifically the divisions for national accounts, for the business register, for prices and household incomes, for methodology and for economic analysis. Total staff in these divisions, which now number only around 20 persons, needs to be increased by at least another 20 persons. This challenge can be met in one of two ways: either increasing GKS staff by 20 persons, or gradually transferring personnel from other activities. In practice, a combination of the two ways may be required, because it would take too long if GKS must wait for the opportunity to reduce staff in other activities. In time, the required reduction elsewhere can be accomplished in two ways: by increasing productivity in the other activities (by means of automation) and cutting back on unneeded data collection.

The term 'priority' as applied to the 6 sectors is not intended to imply that other sectors are unimportant. It simply indicates that GKS places priority on the implementation of new methodologies and tasks for the 6 sectors in the context of the MISP. And that, in support of this, staff needs to be added to the relevant divisions.

At the same time, there is a need to limit the time spent responding to the many requests from public bodies for the provision of statistical information so that GKS staff can turn their attention to the demanding task of improving methodology and data quality.

At present, the largest part of data collection activities at GKS and the MCC consists of compiling detailed data from compulsory reporting forms, an activity that dates from the Soviet period. The number of such forms has actually increased by 10 percent during the past five years, from 185 to 204 (according to one set of estimates that somehow does not jibe with the total in table 1). At present, these activities take up more staff time than the limited collection of data from sample surveys. Besides, a common problem with the sample surveys is that while some involve considerable transport expenses, staff do not receive any payment to cover transport costs, whereas such payment, albeit small, is common in many other countries.

An overall strategy is needed to ensure more efficient use of available staff time. In this context GKS will review the existing work program in order to reduce the work load in some areas and make room for new activities. It is expected that a working group will be appointed to prepare an annual plan for reducing the burden of unneeded data collection, in terms of questions, forms, fre-

quency and sample size. It is appropriate to decide on the cuts step by step, as GKS learns more about modern sampling methods.

The development of IT infrastructure and competencies is fundamental in order to improve efficiency. The computerization of regional offices opens up the opportunity that raw data from respondents can be entered into databases and validated in the rayon, instead of merely being summarized in tables ('svody') for transmission to higher levels. The databases thus created can be adjusted for nonresponse (for the first time) and tabulated at GKS with standard and ad hoc queries. Tabulations can also be sent to the regions for sharing with local government.

Another problem is that regional staff, while expected to follow GKS guidance, are paid entirely by local governments. Regional staff have asked GKS to provide their salaries. During MISP, GKS will have to give serious consideration to the best way to motivate regional staff as they learn the new technologies and adapt to the new methods.

3.2 Proposed sequencing of activities

A major upgrading of the IT infrastructure (hardware, software, and networking) is urgently needed, combined with increased skills in the use of IT tools throughout the organisation. This upgrading will support many of the specific statistical activities in the plan. It is also urgent to eliminate unnecessary work and automate the remaining work, to free up resources for new tasks.

3.2.1 Linkages among tasks

During the MISP, it is important promptly to prepare the various source data needed for upgrading the national accounts, a major focal point for the plan   These include:

- More comprehensive data for producer and consumer prices;
- Production data for discreet months or quarters (not cumulative) as needed for quarterly national accounting;
- Improved data for labor force activities, especially labor migration;
- Better data for the nonobserved economy – especially in construction, small-scale trade and services, transport, and industry;
- Improved data for household incomes and expenditures, especially for affluent families;
- More detailed data from the government budget, on a quarterly basis;
- Implement the international classification systems, especially by activity and commodity.
- Obtain more complete data on the secondary activities of establishments, in support of sources and uses analysis.

Each of these improvements in turn involves prerequisites that the plan will help meet, hopefully in a timely way. For example, the implementation of international classifications is a complex matter that will depend on hardware and software acquisition and on coordinated activity by several divisions, based on a pre-established sequence of operations.

An important part of human resources development is statistical training, based both on on-the-job training and on self-study using manuals downloaded from the internet.

A continuous process of coordination, evaluation and reorientation will be needed so as to make the best possible use of internal and external resources. Due to uncertainty about the timing of donor support, periodic evaluation and adjustment of the MISP will be needed to ensure the best use of available resources.

3.2.2 Intermediate targets and triggers

Some important intermediate targets will be:

- Preparation of a strategy for dissemination and improvement of relationships with users;
- Creation of an interagency work group to prepare an annual plan for eliminating unnecessary data collection;
- A concrete implementation plan for IT upgrading;
- A concrete plan for automating data capture and tabulations;
- A detailed work plan for implementing classifications;
- A detailed work plan for register upgrading;
- A detailed work plan for obtaining data for the nonobserved economy;
- Automation of the system of monthly indicators and analysis;
- Preparation of quarterly national accounts;
- Preparation of annual (or quarterly) poverty rates.

3.3 Funding and sustainability – both domestic and external sources

In order to implement the actions stipulated in the Activity Plan, US $4.5 million are necessary, of which $0.9 million would be from central budget funds, and $3.6 million from donor assistance. Funding from the state budget has been relatively stable over the last years and is unlikely to increase in a major way during the plan period. Donor funding has somewhat increased over the years. The level of future donor support cannot be estimated, but there are signs that TACIS may continue to provide assistance from year to year.

3.4 Risks and assumptions

Critical risks relate to availability of funding. If government support is not provided for reducing the burden of out-of-date surveys, for a temporary increase in GKS staffing to handle the new tasks and for the subsequent transfer of resources from older activities at MCC and in the regions to the new tasks at GKS, there will be less scope to tackle the new problems -- seriously hampering progress. National funding is also needed to provide piece rate payments for sample surveys and to provide sufficient incentives for staff to master new techniques.

National funding has been relatively stable in recent years, but this is insufficient to upgrade performance while still maintaining all of the older statistical activities. It would be beneficial if some national stakeholders accepted the idea that they might either provide financial support to statistical development to cover specific needs or risk seeing that some data may no longer be provided in the same detail and frequency.

Some basic assumptions are:

a. The absorptive capacity of the statistical office is assumed to be rather high in some activities, as some divisions for the leading sectors have persons with high competences and an eagerness to introduce improvements. Note, however, that GKS has limited technical capabilities, and that reinforcements are necessary in those divisions that play a leading role.

b. As in all CIS countries, MCC in Tajikistan plays a special role due to its budgetary flexibility. In the long run, it will be difficult rapidly to improve efficiency and data quality without a closer operational integration between MCC and GKS, perhaps by way of work groups. It must also be said that the budgetary flexibility at MCC is a great convenience for GKS. For this reason, the

goal should be closer operational integration of the two organizations, but not administrative integration.

3.5 Assessment against alternative strategic choices

The MISP program is based on a broad assessment of the present situation against present and future requirements. Thus the program limits the range of proposed actions based on clear priorities. An alternative would have been to develop GKS capabilities on a much broader spectrum, but this path was not chosen as it risked overloading the absorptive capacity of the agency.

4. Implementation program
4.1 Improving policy, regulatory, and institutional framework

There are 4 main subcomponents:

A. Improving relationship with decisions makers
The main target is to improve the understanding of the role of official statistics in order to ensure their support for a restructuring of GKS and its work program to enable GKS to devote the staff time needed to develop the priority indicators. The objective will be met by arranging bilateral meetings/agreements and by organising a seminar for government officials.

B. Improving dissemination in general
A strong focus on dissemination of statistical information is of prime importance in order to demonstrate the value of public statistics and to contribute to the development of social, economic and political life of the country.

Studies of user needs should be launched, based on (a) discussions with one-off focus groups in specific domains and (b) the creation of one or more standing user groups that would meet periodically to review data needs. The results of these studies can serve as the basis for preparing a survey of 100 data users. Results will be analyzed to develop a plan for better meeting user needs.

GKS will work to give a wider range of users easy access to statistics, by improving publications and the web site. The main objectives for the next years are:
- To develop efficient production lines for tables in publications and on web;
- To make a wider use of new, modern methods of data dissemination, via electronic mail, CD-ROM, Web;
- To ensure the efficient publication and marketing of the general statistical reports;
- To improve the methodological explanations (metadata) and present them on the intranet, in publications and on the Web

C. Reallocating resources at GKS
Reallocation would be in four parts.

1. To add to the active personnel of the six leading divisions at GKS (national accounts, prices, household budget survey, register, methodology, and economic analysis) at least 20 persons, as a basis for expanding and upgrading their activities. This in turn would require moving staff gradually from other activities. As the transfer from other activities would proceed slowly, the government would need to 'lend' GKS the required number of persons early in the MISP, with the expectation of being able to compensate for the extra staff later in the plan.

2. Gradually restructure the work of preparing the monthly report so that it would absorb less staff time than at present (an estimated 15 percent). This can be done by using the LAN to automate the preparation of tables and graphics based on data input by each division, and by emphasizing the tabular presentation of data and limiting textual analysis to main variables at least for the monthly report.

3. Cutback on low-priority data collection activities. In support of this, GKS needs to develop skills in evaluating the usefulness of each data item, as a basis for making decisions as to which reports or data items could be omitted or collected less often.

4. By means of automation, reduce the number of staff needed to do the job in the MCC and the regions, thus freeing up staff for new tasks. In this way, total staff in the MCC and the regions could be gradually reduced by 20 workers through retirements, to compensate for the increase in staff in the leading divisions.

D. Strengthening human resources development
The target is to improve the qualifications of statistical personnel. Training will be provided in basic and advanced methodologies and techniques, particularly those that support the priority indicators for MISP. Training will be in the form of seminars abroad and in the country, consultancies, and on the job training.

There will also be substantial opportunity for staff to go on study tours, mostly to CIS countries, and to participate in international seminars. A total of at least 30 overseas trips is envisaged during the five years, each with a specific purpose.

4.1.1 Actions and timeframe

A1) Arrange a 'high-level' seminar on the role of statistics in a modern society and the need to restructure the work of GKS to improve data quality and availability;
A2) Improve implementation of the statistics law, particularly with regard to strict observe of the confidentiality provisions.

B1) Investigate users' perceptions by means of focus groups;
B2) Establish user groups in specific domains;
B3) Improve the production process for publications;
B4) Improve documentation available in publications and on the web site;
B5) Improve the web site in general and make more statistics available;
B6) Create pay-for-use facilities on the Web site

C1) Increase staff for the leading activities at GKS, with government approval;
C2) Develop an interagency working group or consultative procedure, and use this to present a plan each year for eliminating work that is no longer necessary, by not collecting certain data items, by decreasing frequency, and by decreasing sample sizes;
C3) Automate the preparation of the monthly report so that staff can devote more attention to improving basic data;
C4) Learn methods for evaluating the usefulness of each data item collected;
C5) Automate data capture in the rayons;
C6) Gradually reduce staff at MCC and the oblasts by a few percent, to compensate for staff increases in the leading divisions of GKS.

D1) Implement consultancies/study tours for training;

D2) Establish a training plan in support of MISP objectives;
D3) Regular English classes at headquarters.

4.1.2 Proposed output with targets

Some results of these actions would be:
- Increased ability to tackle new statistical tasks
- More feedback from users
- Improved transparency and credibility for the data
- Improved public image in general

4.1.3 Benefits and outcomes

The main benefits would be:
- Improve efficiency of the statistical system;
- Improved satisfaction of users, as they get more reliable data;
- A higher technical level at GKS, more able to handle new tasks.

4.2 Statistical infrastructure development

The major actions in this field are concentrated on:
- Upgrading the national register of establishments
- Implementing international classifications
- Learning skills in sampling
- Learning skills in seasonal adjustment
- Learning skills in evaluating and improving data quality

The schedule for these actions is shown in annex 2

General

In general, GKS inherited weak methodological skills from the Soviet period, inasmuch as sampling methods were not well developed under Soviet statistics and nearly all methodological decisions were made in Moscow. GKS therefore needs to build up the skills from a very low level in many respects. However, the business register has been active for a long time, so GKS has considerable experience on which to build.

For each new area for which skills are to be acquire (classifications, sampling, seasonal adjustment, data quality), GKS will create a working group that will include staff members from the methodology division and from subject matter divisions that rely heavily on the skill in question. Because of the risk of future staff turnover, these working groups will need to prepare methodological materials in writing and post them on the server, for use by each other as needed.

Register use and data collection

The main source for the updating of the register is the legal obligation to register with GKS (among other agencies) when setting up a new enterprise or establishment. This register should be the basis for the systematic monitoring of response and nonresponse for the system of annual, monthly and quarterly statistical surveys in the economic field.

Under the MISP, the improvement of the register will be based on:
- A census for updating register data, to be carried in late 2005 or early 2006. This will provide a way systematically to identify unregistered units that have been missed in an-

nual updating, to update the economic activity of each unit, and to clarify the status of units that may no longer be active.

- A review and, if necessary, upgrading of the methodology for annual updating, based on census findings.
- Installation on a pilot basis of a new system for updating the register in one oblast, based on the use of the register for recording which establishments have/have not responded to each obligatory report and/or survey.
- Linkage of the register at MCC to the databases for various establishment surveys that will be created during the project. This would provide a basis for nonresponse adjustment (for the first time) as well as for identification of chronic nonreporting establishments, which could then be systematically checked for possible closure.

The business census will add unregistered businesses and check on the activity status and activity code of each unit. On the basis of a more systematic procedure for post-census updating, at least annually if not more often, the register is expected to remain up to date from year to year. Accordingly, it is hoped when the next business census takes place one day, it will not yield so many corrections to the register.

Classifications
Harmonisation of national classifications with international standards, is needed for improved data quality and comparability. For example, the national accounts division needs to receive data using the international classifications from other divisions in order to process it as required by SNA standards.

With external support, GKS adopted a General Classification of Types of Economic Activities of Tajikistan harmonised with ISIC and adapted it to the situation in Tajikistan. Beginning in 2000, this system was implemented for register updating. Unfortunately, however, the new classification has not yet been implemented by the various divisions that collect data from enterprises and establishments. Implementation has been held up by a complex set of obstacles – outdated computers that cannot run suitable software for the modern classification, difficulties in agreeing how to redistribute data collection activities among the various divisions, and doctrinal hesitations in government. Similar difficulties also stood in the way of implementing the new classifications in many other former Soviet republics, but Tajikistan seems to be the last or one of the last to do so.

Implementation would begin with the preparation of a detailed work plan and continue with the preparation of applications and coding manuals. Altogether, preparations may take a year or two, after which the system would be implemented across the board, perhaps in 2007. GKS will appoint a working group to supervise the implementation while acquiring related methodological skills by way of seminars and on the job training.

Sampling
GKS has virtually no experience with modern sampling methods. When pressed to take a sample, the standard method is to apply a fixed percent – such as 10 percent of small farmers or traders. This method has yielded bloated samples: an annual one of 75,000 small farmers and a semi-annual one of 42,000 small traders. There is not yet much understanding of how to design cost-effective samples.

During the project, GKS will set up a working group to master sampling skills. Basic skills would be learned in training sessions with consultants, study tours, and on-the-job training. The group would apply the methods to selecting samples in various sectors, thereby improving their practical understanding.

Seasonal adjustment
Although long monthly time series are available for some variables, GKS has no experience with seasonal adjustment,. Seasonal adjustment is greatly needed for time series for production and prices of fresh produce, which vary sharply by season. Seasonal adjustment is especially important for quarterly national accounts. In support of this, GKS needs to convert all data preparation to discrete periods (months, quarters), instead of cumulative estimates as heretofore.

Once again, a working group is needed to learn new methods. Two visits by an international consultant are planned to introduce seasonal adjustment software and to train the working group in its use. The second visit would take place 12 or more months after the first, to enable the consultant to address problems raised by the group after a year of experience in the use of the program.

Data quality
GKS has little experience in dealing with data quality issues. No attention has yet been paid to the problem of nonresponse and how to adjust for it. Validation procedures are minimal and rudimentary. The creation of databases in place of stepwise summaries will open new possibilities for evaluating and upgrading data quality in such ways as:

- Validation of the data during data entry. This will require the preparation and adjustment of validation rules to catch outliers while not imposing an excessive burden on rayon staff. Written instructions will also be needed for each survey to guide enumerators in managing outliers – and what to do if the data still fails the validation test after checking with the respondent.
- Nonresponse adjustment. Heretofore, GKS has never even systematically measured nonresponse, much less adjusted for it.
- Preparation of technical notes for each data series, describing methods and documenting quality issues like nonresponse adjustment.

A basic problem inhibiting improvements in data quality is that the field staff are still very close to the administrative functions of local government, as a result of which they find it difficult to separate their own statistical duties from the administrative duties of general government. To deal with this problem, GKS will provide training and guidance to local officials.

Publications
The plan here includes the following items:
- Assist the Division of Economic Analysis and International Relations to utilize desktop publishing software in order efficiently to produce publications of better quality.
- Assist MCC to upgrade printing skills and equipment in support of color printing.   This would also save the time of staff members so they could devote more attention to analysis.

4.3 Upgrading statistical operations

Priorities are to upgrade data for monitoring the macroeconomic situation and the extent of poverty (as required by the PRSP and MDG), and to meet the requirements of the IMF General Data Dissemination Standards (GDDS).

The main tasks in this domain are the following:

- To improve the System of National Accounts, according to SNA-93. Special attention will be paid to improving methods for deflation, the estimation of the non-observed economy (shadow and informal), and the reconciliation of sources and uses data;
- To prepare and publish Quarterly National Accounts (QNA) for the first time;
- To prepare an official measure of the share of the population in poverty and an annual or quarterly series for this key indicator;
- To implement standard international classifications, especially for economic activities and for commodities;
- To update the business register and upgrade the methods for its annual updating.

The schedule for these actions is shown in annex 2.

System of national accounts
The proposed actions are:
- To upgrade the annual accounts, with special attention to improved coordination with balance of payments data, commodity flow techniques, and improved estimation of expenditures in constant prices;
- To improve methodologies and estimations for the non-observed economy, including illegal economic activity;
- To prepare time series on quarterly Gross Domestic Product with seasonal adjustments;
- To improve estimates of Gross National Income, taking account of labor migration;
- To prepare a work plan for the creation of GDP measures at the oblast level, including a list of data requirements.
- To begin preparation of the country's first input-output table, a step that will only be feasible once GKS has implemented international classifications for activities and commodities;

Price statistics
The main actions are:
- To improve the calculation of Consumer Price Index, by enlarging the basket of goods covered and by upgrading methodology;
- To improve the calculation of the Producer Price Index, by enlarging the basket of goods covered and by upgrading methodology;
- To use seasonal adjustment for selected components of both indexes;
- To prepare comparative measures of living costs under the International Comparisons Program (ICP);
- To prepare an index of agricultural prices.

Industrial statistics
Industry accounts for approximately 23 percent of GDP. The main objective is:
- To implement the Tajikistan classification system for economic activities (based on ISIC) and a consistent system for commodities, which will serve as a basis for the development of the main industrial indicators;
- To improve monthly calculations of the Index of Industrial Production with value added weights, methodological upgrading, and seasonal adjustment;
- To implement sample surveys of small industrial enterprises, particularly informal ones producing simple commodities like bread and vegetable oil;

Investment and construction statistics
The aim is to improve the system of indicators and statistical surveys, and especially:

- To investigate the widespread understatement of the value of construction activity and look for ways to measure it;
- To develop a workable index of construction costs.

Domestic trade statistics

The actions proposed are:

- To improve estimates of the volume of retail trade in the non-organised trade sector;
- To survey expenditures by vendors (up to now, only sales measured);
- To rationalize sample size for the semi-annual survey of retail trade in markets, which currently comprises 42,000 vendors, or 10% of the population of vendors in markets;
- To carry out a survey of energy use by establishments.

External trade statistics for goods and services

The main actions should be:

- To develop quarterly unit-price indexes for exports and imports and quarterly constant price measures of exports and imports;
- To obtain more comprehensive data from the Customs Service, including data on the number of units imported where relevant (cars, planes, etc.), in addition to value and tons.

Statistics of transport, services and tourism

The main actions proposed are:

- To carry out a survey of automobile owners to capture the informal provision of transportation services;
- To survey consumers of services to learn of their expenditures for services provided by the informal economy;
- To conduct a survey of tourist facilities

Environment statistics

The main tasks proposed are:

- To establish a plan for developing environmental statistics based on a study of user requirements and existing methodologies and data sources

Agriculture statistics

The current program of data collection for agriculture is largely based on questionnaires for Soviet collective farms, and has not yet been fully reoriented toward individual farmers. So the main task is to rationalize the program of surveys by eliminating unnecessary questions and forms and developing new forms that are more suitable for individual farmers.

Further important tasks are:

- To carry out a sample survey of the 18,000 dekhan farmers (those with regular employees), now covered by an obligatory report.
- To improve the sample surveys for small, non-dekhan farm households, especially by redesigning the sample, now excessively large (75,000), and by reviewing the questionnaire to obtain more comprehensive production data;
- To review the method for estimating gross farm product in constant prices, in part by means of a study tour;
- To apply seasonal adjustments to quarterly and monthly production data.

Demographic statistics

The actions proposed are:

- To master a method for measuring infant and maternal mortality by way of household interviews, and to test out the chosen method in a single rayon;
- To carry out a nationwide survey of infant and maternal mortality in a sample of rayon based on the method tested in the pilot. Results to be used for adjusting administrative measures of mortality, which are believed to widely understate infant mortality.

2010 Census of Population

In the framework of the run-up to the 2010 Census, the main preparatory tasks identified for donor assistance are:

- Make a work plan for census preparations that takes account of new technologies especially for data capture and the production of census maps;
- Develop a specific plan for the IT side of the census;
- Provide equipment, software, training and satellite images for preparing census maps using the Global Positioning System (GPS) and a Geographic Information System (GIS);
- Provide equipment and training for experimental data entry by use of a scanner and OCR during the pilot census, to test feasibility for full census;
- Support the preparation of tabulation routines for producing tables for the country and for regions using a suitable program such as CS Pro.

The GPS units would be stand-alone units, normally accurate to within 10-15 m. The satellite images would be from Landsat, for identifying the exact location of all inhabited areas, and from Spot5 and Quick Bird for close-up images of inhabited areas that would distinguish all streets and, in the case of Quick bird, individual houses.

The OCR scanner, from Fuji, can accept a page of A3 and can read at least 50 pages per minute. OCR software that works with Cyrillic letters will of course be required.

The main tasks identified for Government funding include:

- Field work to collect the data needed for census mapping plus desk work to prepare the maps using GIS software and satellite images;
- Purchase of a broad range of standard equipment for data processing and for printing forms and results of the census;
- Programming work in support of the census;
- A pilot census in 2008;
- A broad range of other preparatory tasks.

Labour force statistics

The proposed actions are:

- To continue the LFS for the four quarters of 2005, as a followup to the first such survey in 2004 (it is anticipated that routine Government funding would become available for continuing the survey after 2005);
- To establish a new sample for a permanent LFS;
- To use the data to analyze labor migration outside Tajikistan and prepare estimates of the time spent in informal economic activity.

Social statistics

The actions proposed are:

- To propose a clear poverty line for the country and oblasts, based on a minimum nutrition basket;

- To upgrade the Household Budget Survey (HBS) sample and methodology in order to develop quarterly poverty measures consistent with international standards;
- To conduct a survey of affluent households for measuring the unobserved economy;
- To carry out a wider household survey in 2008 to obtain more comprehensive poverty data for the country and for small groups of rayon, within oblasts.

Education statistics

The main task will be:

- To adapt and implement the International Standard Classification of Education (ISCED). An inter-agency working group would be set up with the Ministries of Labor and of Education, and other interested agencies. A national version of ISCED would be prepared and implemented by common agreement.

Health statistics

The main tasks proposed are:

- To develop and test a question or set of questions for households concerning their access to clean water;
- To develop and test a question or set of questions for households concerning women's access to reproductive health services.

Once tested, these questions could then be added to the household budget survey in the future.

4.4 Investments in physical infrastructure and equipment

A thorough upgrading of the IT equipment and skills is fundamental in order to achieve improved efficiency and quality.

The main objectives related to **information technologies (IT)** are the following:

- To develop a detailed program for improving the IT infrastructure, to ensure improved efficiency and quality of data processing;
- To modify radically the technologies for collection, processing, storage and transfer of primary data;
- To create databases for handling the preparation of tables;
- To upgrade servers, work stations and networks as well as make available standard licensed software products to meet existing and new requirements;
- To implement proper solutions for data protection;
- To conduct training both for IT specialists and non-IT specialists

4.4.1 Actions and timeframe

a) To prepare a detailed ICT implementation plan

There are already some ideas on how to improve the ICT infrastructure within GKS and MCC. However, there is still a need to discuss and agree on a concrete, stepwise implementation program, based on consultations with outside experts, to be started early in the MISP.

b) To develop the ICT technical infrastructure

Several investments are needed to improve efficiency:

- To acquire high performance servers to support the data processing processes and provide additional data storage capacity;

- To develop the local area network (LAN) at headquarters and acquire network equipment;
- To install LAN's in oblast offices.
- To provide at least 80% of the staff of each unit at headquarters with workstations; and to provide around 70% of field staff with workstations.
- To upgrade methods for exchanging data between the central office and regional offices, where feasible by internet, and otherwise by fax, CD and diskette;
- To purchase new operating systems (MS Windows XP & Millennium edition);
- To acquire modern printing equipment. MCC was until recently using a 5-year old risograph, which had already exhausted its useful life. With World Bank funds, it has now acquired two new risographs with computer interface, which can print 1 sheet per second. Under the plan, it would acquire 5 additional risographs, 3 for the oblasts and 2 for MCC. A risograph is a high-speed copier that can accept input either from a computer or its own scanning screen and is well suited to printing documents in limited numbers.
- To acquire as well a color phaser xerox for printing color graphics when needed;
- To acquire CD writers, enabling the launch of electronic copies of statistical publications;
- To provide an IDSL connection to the Internet at a speed sufficient to allow simultaneous connections at 6 computers.   The connection would be by way of a dedicated server and switch. Access would be limited to division chiefs and certain specialists, to prevent overload.

c) To implement solutions for questionnaire design
- Many questionnaires were inherited from Soviet times, when most design took place in Moscow. When questionnaires are designed, there is no central working group responsible for standardizing them or ensuring that they are well designed.
- The plan foresees the formation of a team concerned with the design of new questionnaires, to ensure consistency across surveys and to facilitate comprehension, legibility of answers, ease of editing and ease of data entry.
- Such a task would logically fit into MCC.

d) To implement solutions for data capture, validation, control and storage
- The present system for data capture dates from the Soviet period. Few data are entered into databases; most are summarized at rayon and oblast levels, so that data for individual respondents never reaches the central office. This urgently needs to be converted to a database standard, with data for individual respondents entered in the rayon. As this is accomplished, links need to be developed at HQ between each database and the register.
- MCC will select one or several databases for a pilot test of data entry in the rayon, ones that lend themselves to validation and perhaps ones that do not include much data from remote rayon. Besides commercial programs like MS Access, STATA and SPSS, MCC should examine the advantages of free software from statistical offices outside Tajikistan, including CS Pro (from the US), Pascal (from Holland) and PC-AXIS (from Sweden). Standardization in the use of a database program for data entry would make it easier for programmers to exchange knowledge and assist each other with self-study.
- In the long run, the capture of data by means of databases is expected to shorten the time lag between data collection and publication, although in the short run delays may be experienced as staff learns how to utilize the validation procedures efficiently.

e) To implement solutions for processing and dissemination
Several measures should be taken:
- To standardise tools for analysis and tabulation;

- To provide direct access to databases from all work stations for analysis and tabulation;
- To acquire tools (such as PC-AXIS) for tabulation and dissemination in printed publications or on the Web.
- To use a LAN-resident database program for entering data from various GKS divisions for the monthly report, and for automatically producing well-formatted tables and graphics for the monthly report.

f) To provide training in IT tools
The lack of high-level IT personnel (due to weak staff motivation) is causing problems in the development and maintenance of IT at the MCC. With the transition to new systems for data collection, processing and dissemination there is a need for training of all staff.

Some specific actions are:
- To organise training courses for IT personnel
- To form a working group for IT development.
- To train selected staff from the regions in basic skills for maintenance of personal computers, LAN's. protection from viruses, backup of data, etc.
- To train analytical staff at GKS in using standard statistical packages to prepare their own tabulations;
- To set up a virtual library on the LAN of specialized literature in statistical methodology and ICT.

g) To rehabilitate physical infrastructure

The plan provides fund for a rapid rehabilitation of the GKS building, housing both GKS and MCC. Built in 1990, the building was severely damaged during the civil war and neglected afterwards. In recent years, the government has gradually begun to repair the building. Under MISP, the government would pay for nearly half the cost of completing building rehabilitation, with donors paying the rest.

The plan also provides for 30 vehicles for rayons that lack vehicles at present. Only about half the rayon offices at present have vehicles. In rural areas, public transport is minimal or absent.

4.4.2 Proposed outputs with targets

- Improved data quality and accessibility due to the availability of databases.
- Reduction in work load, especially at the oblast level and the MCC, due to elimination of the manual production of tabulations;
- Prompt production of the monthly report without overburdening staff.
- Improved public image of GKS;
- A statistical product with higher quality, timelier and more accessible.

4.4.3 Benefits and outcomes

Some of the main benefits of the actions will be:
- Enhanced timeliness, reliability and consistency of data;
- Improved user satisfaction and confidence in the data;
- Improved efficiency;
- Improved staff satisfaction based on more time for analysis and increased competence.

5. Investment and financing plan

5.1 Input requirement

9. Estimated costs for IT component and other capital investments

	Costs in \$US thousands, by group
	B	C	E3a	E3b	F	G	H1	H2	Total
I. IT component - total	28	29.8	5	40	1329	104	216	283	2034
Of which:									
1.1 Procurement of equipment					1057		48	203	1308
- Servers					172.5				172.5
- Workstations, printers, UPS and spare parts					717		11		728
- Specialized equipment					167		37		204
- Unspecified IT equipment for census								203	203
1.2. Acquisition of program products	3	5	5	15	120	35	17	80	280
- Licensed					100		17		117
- Developed by local experts	3	5	5	15	20	35		80	163
1.3. Services	25	24.8		25	152.5	68.5	151	0	422.7
- Telecommunications					15				15
- Training of personnel, study tours		6			50	6	12		74
- Technical assistance (months)	2	1.5		2	7	5	6.3		23.8
- thousands of dollars	25	18.8		25	87.5	62.5	78.8		297.5
- Other services (satellite images, configuration, design etc.)							60.0		60
II. Other capital investments - total					380				380
2.1. Purchase of motor vehicles					180				180
2.2.Major repair of the Central Office of GKS					200				200
Total investment	28	29.8	5	40	1709	104	216	283	2414

The availability of funds for upgrading statistical and physical infrastructure of the statistical system constitutes the main precondition for ensuring the sustainable development of statistics and for the MISP in particular. Realization of the MISP will require equipment and software, technical assistance, and funds for other expenses. Equipment and licensed software would account for 39.5 percent of the costs, technical assistance for 32.4 percent, and other expenses for another 28.2 percent.

A breakout of the cost of investments in IT and other capital goods to be purchased under the project is presented in table 9. In addition to hard goods and software, such costs also include 25 months of TA for IT development, self-made applications, training costs, costs of connecting to the Internet, etc., reaching 52.8 percent of the total cost of the project.

Technical assistance is essential for upgrading methodology at GKS. Table 10 shows the number of months of TA broken down by subject area. An average month of TA is expected to cost about \$12.5 thousand, although the cost will of course fluctuate considerably from case to case. The total number of TA months is estimated at 118.4, equivalent to nearly 10 person-years of TA, or 2 person-years per year of the plan. This total includes a long-term consultant in statistical methodology for 2 years during 2005-07.

10. Overview of costs by subject areas
(in thousands of dollars)

	Consultant		Equip-ment	Other costs	Total costs	Govt contrib	Unfun-ded
	months	costs					
A. Improving policy, regulatory and institutional framework				18	18.0		18.0
B. Allocation of resources & general management	2.5	31.3		13	44.3		44.3
C. Improving dissemination	2.5	31.3		15.5	46.8		46.8
D. Improving statistical methodology	30.5	381.3		61	442.3		442.3
E1. SNA	21	262.5		39	301.5		301.5
E2a. Price Statistics	4	50.0		16	66.0		66.0
E2b Household Budget Survey & Poverty	6	75.0		91	166.0		166.0
E3a. Implementing International Classifications	5	62.5		29	91.5		91.5
E3b. Registry	5.5	68.8		95	163.8		163.8
E3c. Industry	1.9	23.8		5	28.8		28.8
E3d. Construction	1.5	18.8		5	23.8		23.8
E3e. International Trade	1	12.5		3	15.5		15.5
E3f. Domestic Trade	1	12.5		17	29.5		29.5
E3g. Transport & Services	1	12.5		30	42.5		42.5
E4. Agriculture and Forestry Statistics	2	25.0		21	46.0		46.0
E5a. Demographic	1.5	18.8		16	34.8		34.8
E5b. Labor Force	2	25.0		100	125.0		125.0
E5c. Health	0.5	6.3		2	8.3		8.3
E5d. Education	2	25.0		5	30.0		30.0
E6. Environmental statistics	1	12.5		15	27.5		27.5
F. Improving Technical Capacity of the Statistical System							
1. IT: equipment & licensed software	4	50.0	1057	100	1207.0	41	1166.0
2. Other IT-related activities	3	37.5		85	122.5		122.5
3. Building upgrade			200		200.0	96	104.0
4. Cars			180		180.0	75	105.0
G. Improving the Efficiency and Effectiveness of the MCC	9	112.5		53	165.5		165.5
H. Preparations for the Census of Population, 2010							
1. Consulting, GIS, OCR scanning (donor share)	8	100.0	48	91	239.0		239.0
2. New equipment, mapping in field, programming, pilot census, etc.			203	457	660.0	660	0.0
I. Monitoring the Implementation of the MISP	2	25.0		22.5	47.5		47.5
Totals	118.4	1480	1688	1405	4573	872	3701

Other costs in table 10 include costs for software and program development, itemized in table 9. In addition, the major cost items in the 'other costs' column are:

- Start up expenses for new surveys ($344,000)
- Pilot census and other non-IT preparations for census ($243,000)
- Study tours for 16 staff ($48,000)
- Participation in international seminars ($45,000).
- Internal seminars ($64,000)
- A mix of the above 3 items ($15,000)

11. Detailed budget by years

	Consultant months						Other expenses					
	05	06	07	08	09	Ttl	05	06	07	08	09	Ttl
A. Improving policy, regulatory and institutional framework						0	4	10		4		18
B. Allocation of resources & general management	1.5	1				2.5	2	5	2	2	2	13
C. Improving dissemination	1	0.5	1			2.5	3.5	11	1			15.5
D. Improving statistical methodology	7.5	14.5	8.5			30.5	14.5	17	11.5	9	9	61
E1. SNA	3	6	4	4	4	21	13	3	7	8	8	39
E2a. Price Statistics	1	1	1	1		4	4	4	4	4		16
E2b Household Budget Survey & Poverty	1	1	2	1	1	6	4	4	4	60	19	91
E3a. Implementing International Classifications	1	1	1		2	5	8	6	15			29
E3b. Registry	1.5	1.5	1	1.5		5.5	60		10	15	10	95
E3c. Industry	0.7	0.5	0.7			1.9			5			5
E3d. Construction		1	0.5			1.5		5				5
E3e. International Trade		1				1	3					3
E3f. Domestic Trade	1					1	7		10			17
E3g. Transport & Services		1				1		30				30
E4. Agriculture and Forestry Statistics	1.5	0.5				2	21					21
E5a. Demographic	1	0.5				1.5	1	15				16
E5b. Labor Force		1	1			2	100					100
E5c. Health		0.5				0.5		2				2
E5d. Education		1	1			2	1		4			5
E6. Environmental statistics			1			1				15		15
F. Improving Technical Capacity of the Statistical System						0						0
1. IT: equipment & licensed software	2	2				4	360	310	262	225		1157
2. Other IT-related activities			1	1	1	3	26	22	15	11	11	85
3. Building upgrade						0	80	40	40	40		200
4. Cars						0	60	60	60			180
G. Improving the Efficiency and Effectiveness of the MCC	2	3.5	2.5	1		9	3	14	11	20	5	53
H. Preparations for the Census of Population, 2010						0						0
1. Consulting, GIS, OCR scanning		0.7	1	3.9	2.4	8				136	3	139
2. New equipment, mapping in field, programming, pilot census, etc.								32.1	55.3	274	298	659.8
I. Monitoring the Implementation of the MISP		1		1		2	6.5	4	4	4	4	22.5
Sub-totals	26	41	27	14	10	118.4	782	594	521	827	369	3093
Plus: cost of consultants							321	509	340	180	130	1480
Grand total							1103	1103	861	1007	499	4573

5.2 Investment and Financing Plan

According to table 10, the plan requires $4,573 thousand, of which $872 thousand would come from central budget funds, and $3,701 would come from external donor assistance. The state share amounts to 19.1 percent of the MISP budget. The state share may turn out to comprise some donor assistance for the census; that is not yet clear. A detailed budget is seen in annex 2.

No financial backing for the plan has yet been discussed with donors, but there are some indications that Eurostat may be willing to provide an average of 300,000 Euros per year under its TACIS program. In addition, the IMF has discussed the possibility of providing a long-term consultant for 2 years to assist GKS in raising its methodological skills.

Table 11 shows the distribution of expenditures by year. This tabulation shows that consulting services bunch in the first three years, especially in 2006, while expenditures fall off sharply only in 2009, the last year of the project. This pattern reflects in part the eagerness of the various divisions to begin the work.

5.3 Cost-effectiveness analysis

A national official statistics provides a public good, leaving limited potential for cost recovery. Publications and other statistical products should have a low cost to ensure wide distribution. However, statistical agencies in several other countries have to an increasing degree begun to render paid services and compile statistics on demand. This option should also be examined, but unfortunately cannot be expected to yield a very substantial income in the short run, at least not until the demand for data from business in general and foreign investment in particular has developed further in Tajikistan.

Estimated costs have been kept moderate, taking into account the need to gear activities to a level that would be sustainable with the country's own resources over the long run. The proposal is considered to be a minimum to reach acceptable standards key areas.

The benefits of the improved statistical system are several:
- A broader and more consistent picture of the economic and social situation of the country;
- An improved basis for analysis and targeted development programs;
- An improved basis for fact-based political decisions;
- A better basis for enlightened citizen participation;
- A better basis for business investments and production.

6. Implementation plan

6.1 Mechanisms for implementing the master plan

The MISP provides strategic objectives and a description of the main actions to be initiated over the next 5 years. However, several uncertainties will affect program implementation. For the moment, the program lacks funding. Furthermore, the development of the national statistical system is highly dependent on the development in different administrative sectors, including telecommunications services. In addition, it is not yet clear whether the Government will support the proposed increase in the staff for the 6 leading divisions or the proposed cutbacks in older data collection systems. Finally, the year-by-year estimates indicate an extraordinarily high level of consulting activity in 2006, an activity that may exceed the absorptive capacity of GKS.

At this stage, it appear most realistic to view the MISP as the first step in a flexible implementation program, based on a regular review of the availability of funding and competent manpower. The coordinating function with GKS should thus be strengthened in order to take responsibility for implementing the plan, ensuring a well-coordinated and stepwise implementation.

6.2 Implementation alternatives considered and rejected

No implementation alternatives were considered at this stage.

6.3 Sustainability issues

The long-term development of the national statistical system of Tajikistan is highly dependent on the political support for a well-functioning statistical system, providing the necessary legal, administrative and budgetary framework.

For long-run sustainability, the government will need to find ways to substantially increase its budget for statistics, to pay for the cost of recurring surveys and provide sufficient incentives to keep skilled staff at GKS and the MCC motivated and willing to stay in the statistics system.

Some of the risk factors that might impede the sustainability are:

- Lack of political support and commitment for a modern statistical system, by not providing adequate legal, administrative or budgetary conditions;
- Lack of capacity in the present statistical system, due, for instance, to loss of competent staff;
- Lack of focus on measures for improving efficiency.

A basic strength that needs to be kept in mind is the impressive willingness of GKS staff to work long hours when needed to get the job done.

6.4 Monitoring and evaluation

Regular monitoring and evaluation will be an important element in the implementation of MISP. GKS will establish a working group to review the progress of MISP. Consultancies will assist in an inception and mid-term review of progress, at which time there would be an opportunity to re-schedule activities and reallocate funds as necessary to deal with emerging needs. A more thorough review of the statistical system should be performed at regular intervals, for instance as part of IMF's Report on Observing the Standards and Codes (ROSC) – a review that was performed once before in 2003.

Annex 1. Members of the working group for MISP

- Gukasova, Tatiana Petrovna – Head of the Division of Current Economic Analysis and International Relations

- Turaev, Barot Turaevich – Head of the Division of Household Budgets and Price Indexes

- Shagiakhmetova, Nailya Nurmukhametovna -- Head of the Personnel Division

- Tokhirov, Eshodzhon Sufiidzhonovich – Head of the Department of Methodology and International Systems of Standardization

- Suleimonshoev, Nuralisho Suleimonshoevich – Deputy Director of the Main Computing Center

Annex 2. Details of the MISP

Item	Comment	Years	Consultancies	Other funds
A. Policy, Regulatory & Institutional Framework				
1. Seminars and other actions to improve relationships with decision-makers by highlighting the role of statistics and the need for restructuring the work of GKS to improve data quality and quantity.	Government support needed to restructure the work.	2006		$10,000
2. Improve implementation of the statistics law. Annual analysis of which provisions are not fully observed, frequent statements by leadership urging compliance, 2 internal seminars with regions.	Regional offices freely share data for individual enterprises with local government officials, in violation of law.	2005-09		$8,000
3. Convince the government that Goskomstat should pay for all of the budget of regional offices.	Regional offices are presently paid by local authorities.	2006		
Group A Total				$18,000
B. Allocation of resources & general management				
1. Set up an interagency working group to review the opportunities for cutbacks in the data collection program, with cutbacks in frequency, sample size, & questions, to eliminate unnecessary, out-of-date activities.	Annually propose a cutback plan, for approval by chairman & government. Cumulative cutbacks of 30-50 % feasible.	2005-09		
2 Develop a plan for adding staff to the 6 priority sectors for the MISP.	An estimated 20 staff would need to be added	2005		
3. Estimate potential labor saving at MCC and in regions, based on the work plan mentioned in group G.		2006		
4. Examine & implement ways to save labor at GKS for preparing the monthly report				

a. Review content of monthly data: look for ways to shift emphasis towards reporting tables & graphics, with less text (as in Russia).	A consultant could help GKS utilize experience of other CIS countries to optimize reporting.	2005	0.5 mo	
b. Automate preparation of the report by means of a LAN-based database program for assembling the tables & graphics from various divisions at GKS.	Requires upgrading network & designing database system for preparing tables at MCC.	2005-06	2 mo for design & implementation	$3,000
5. Prepare a plan for transferring staff to the 6 priority sectors from labor saved above; seek govt. support.	Transfer may be virtual, with new staff in some sectors & retirements in others	2006		
6. Develop a plan for the staff training in support of MISP goals, especially of training for persons trans-ferred to priority sectors. Identify any gaps in the training envisaged in the MISP.	Implementation of this plan would mainly be by way of con-sultancies and seminars speci-fied elsewhere.	2005		
7. English training 2 x per week 2 classes for selected staff, with attention to basic statistical materials.	Basic & advanced. Use a quali-fied local teacher.	2005-09		$10,000
8. Develop a plan for paying piece rates to enumer-ators for survey work, to cover transportation costs. Request such funding in the GKS budget.	Such piece rates are common in other countries.	2005		
9. Implement the plans		2006-09		
Group B Total			2.5 mo	$13,000
C. Improving Publication and Dissemination of Statistical Information				
1. Improve the dissemination system & methods of work with users.				
a. Promotion of electronic dissemination, including improvement of the GSK Web page	With IMF help, GKS has begun to set up web site	2005-06		$2000
b. Metadata: Explain methodologies and data quality issues in publications and on website.		2006		
c. Creation of pay-for-use facilities to provide detailed data for those who pay		2006	0.5 mo	$2,000

d. Use GIS to produce color maps showing situation by rayon.	Free software available from the UN.	2006		$1000
2. Understanding user needs				
a. Organize focus groups to discuss specific data sets and elicit feedback from knowledgeable users.	Useful to elicit frank opinions and concerns of users.	2005		$500
b. Develop and carry out opinion survey of 100 data users to study data needs of users and their opinions about GKS data.	Interviewers need to be well educated & well dressed to get access to busy respondents.	2006		$1000
c. Carry out improvements the data and its dissemina-tion to meet user concerns.		2007	1.0 mo	
3. Upgrade technical skills of staff who prepare gene-ral publications				
a. Selection of appropriate desktop publishing software and training in its use for preparing pubs.	Staff currently rely on MS Word for major pubs	2005	1 mo.	$2000 for preparing prototypes
b. 2 study tour to 2 different countries to observe methods for preparing publications.		2006		$6,000
4. Establish one or more formal user groups, to provide a channel for periodic feedback.	Will include representatives from the most intensive users.	2007		
5. Advertise GKS publications	Advertisements need to appeal to user needs.	2007		$1000
Group C Total			2.5 mo.	$15,500
D. Improve Statistical Methodology				
1. Long-term consultancy to help with development of the methodology function	Needed to support the new functions.	2005-07	'05 6 mo, '06 12 mo, '07 6 mo	$10,000
2. Send GKS staff to conferences on statistics in other countries.	3 trips per year, 5 years	2005-09		$45,000
3. Study tours to learn how samples are selected in another CIS country.	2 members of the methodology group for sampling	2005-06		$6,000

4. Training in the new skills				
a. Creation of 4 working groups for sample selection, seasonal adjustment, classification, and data quality.	The groups will study and implement the new methods	2005		
b. Develop skills in sample selection, use skills to select new sample for HBS & other surveys. Choose and install supporting software.	Function does not yet exist, needed for sample surveys	2005-09	1.5 mo each for 05, 06 and 08	
c. Develop skills in seasonal adjustment, use to adjust various production and price data. Choose and install supporting software.	Function does not yet exist, needed to identify trends	2005-09	06 – 1 mo 07 – 1 mo	
d. Develop skills in classification, assist in the implementation of ISIC.	Function does not yet exist, needed for implementation	2005-09		
e. Develop skills in the evaluation of data quality.	Function does not yet exist, needed for improved data	2005-09		
Group D Total			30.5 mo	$61,000
E1. SNA				
1. Training in methods of national accounts, participation in international seminars and study tours to countries with similar experience.	Necessary to raise skills.	2005-09 as con-venient		$15,000
2. Development of SNA annual accounts, involving in particular improved coordination with balance of payments data, commodity flow techniques, and improved estimation of expenditures in constant prices	Feasible on the basis of data that is already available.	2005-06	6 months	
3. Document sources & estimating methods for SNA.	Publish on GKS web site	2006	1 month 2006	
4. Obtain quarterly data from the government budget that is more prompt and detailed.	Needed for preparing quarterly accounts.	From 2005		
5. Improve the calculation of Gross National Income, based on improved estimates of remittances	Requires improved estimates of remittances.	2006		
6. Introduce quarterly national accounts, based on	Feasible, given source data for discrete periods & seasonal	2005-07	2 months	

balanced value added & expenditure results, presented in discrete (not cumulative) way, in constant prices & seasonally adjusted.	adjusted			
7. Discontinue the monthly GDP, which does not meet SNA requirements. Announce a clear schedule & revision policy, providing for periodic revisions based on data that is more complete Seminar on new data.	Monthly data would no longer be necessary if good QNA available.	2007		
8. Send 2 staffers to other CIS countries to learn how they prepare estimates on the nonobserved economy				$6,000
9. Develop comprehensive work plan for improved coverage of the nonobserved economy, in collaboration with other divisions and Ministries. Seminar.	This sector poorly covered in accounts and requires a multi-faceted approach.	2005		$4,000
10. Carry out improvements in the estimations of the nonobserved economy. Seminar to discuss findings	Will require the attention of 1 or 2 dedicated staff.	2006-07	4 months	$4,000
11. Prepare a work plan on steps needed to gradually prepare GDP estimates at the oblast level.	Identify data requirements so that data collection can begin.	2007		
12. Improve procedures for preparing estimates in constant prices, relying mainly on deflation.	Requires improved price data	2007		
13. Implement consistent classifications as these become available.	Requires prior implementation for source data.	2008-09	4 months	
14. Begin preparation of input-output table, first for Tajikistan.	Requires step 13 &. Requires own unit with special staff.	2008-	4 months	$10000
Group E1 Total			21 months	$39,000
E2a. Price Statistics				
1. Expand the basket of goods used and add outlets for calculating CPI & PPI to include luxury goods, imputed rent, important producer goods.	Most of the required data for this purpose are already available.	2005		
2. Update CPI methodology to deal with new products, quality adjustment, imputation, replacement.		2005	Consultant for one month, 2005,	

Review formula for periods of rapid inflation.			to work on all 3 tasks.	
3. Update PPI methodology to deal with methodological issues such as the price concept being measured, for example export prices.		2005-06		
4. Select new applications for calculating CPI & PPI and adapt to Tajikistan	The existing programs are CIS, 1997	2005		
5. Collect price data based on new baskets		2006-09		
6. Implement internationally standard classification systems for CPI & PPI, to ensure comparability.	The required data for this purpose are already available.	2006	1 mo 2006 and 1 mo 2007 to work on 2 tasks.	
7. Calculate seasonally adjusted versions of certain price measures, as for agricultural products.	Long time series are available for analysis.	2006-07		
8. Review methodology and baskets.		2008-09	1 mo.	
9. Prepare comparative measures of living costs under International Comparisons Program (ICP)				
10. Include agricultural goods in the PPI, using data collected by the Division for Agricultural Statistics.	Up to now, agricultural goods not included in PPI.	2006		
11. Conduct 4 internal seminars during consultant visits to train HQ & regional staff		2005, 06, 07, 08		$16,000
Group E2a Total			4 mo.	$16,000
E2b Household Budget Survey & Poverty				
1. Define official poverty cutoffs for nation and by oblast, based on preliminary studies of minimum food basket.	Tech paper. Data are available for estimating prel. poverty rates, given a poverty line.	2005	1 mo 05 1 mo 06	
2. Develop methodology of estimating annual & quarterly poverty levels, gap, severity, Gini ratios, etc.; introduce software that helps prepare the measures.	Training is needed to develop the methods and ensure data quality.	2005-06		
3. Draw larger sample for HBS, based on 2000 population census	Current sample is based on a Soviet sample.	2006		
4. Redesign HBS questionnaire to provide full data on	HBS questionnaire dates from	2007	1 mo.	

hh income & expenditures.	2000			
5. Planning for special survey to collect data on affluent hh, for use in measuring nonobserved economy.	Special approach needed to gain confidence of subjects	2007		
6. Update poverty calculations based on data from new sample. Prepare historical series based on splicing with older sample & LSMS data.	A technical paper will be needed to explain methods for splicing the data.	2007	1 mo.	
7. Prepare for and conduct a larger-scale survey of living standards with additional modules, 3000 hh.	May cover special modules such as health & education.	2008	1 mo	$60,000
8. Analyze results of larger-scale survey, review & improve methods for measuring poverty.		2009	1 mo	
9. Special survey of 500 affluent households, using special enumerators and instructions.	Special approach needed to gain confidence of subjects.	2009		$15,000
10. Conduct 4 internal seminars during consultant visits to train HQ & regional staff.		2005,06, 07,09		$16,000
Group E2b Total			6 mo	$91,000
E3. Business statistics. a. Implementing International Classifications				
1. Study tour by two Goskomstat staff to another CIS member to study how the country implemented international classifications.	All CIS members have experienced similar problems, Kyrgyz quite recently.	2005		$6,000
2. Develop a detailed work plan for implementing the ISIC and commodity classifications, with the help of an international consultant. Identify who will carry out coding. Reallocate data collection tasks among GKS divisions.	Implementation will require coordination among divisions. E.g., statistics for communal hot water will move from 'community services' to industry.	2005	1 month for both tasks.	
3. Upgrade and adapt existing software for the implementation of ISIC, including a bridge table from the old system.	The registry division now uses similar software.	2005-06		$5,000
4. Carry out a pilot test of implementation in a single rayon.	Select rayon with many establishments.	2006	1 month	$3,000

5. Train coders for the entire country & implement system for a given survey year.	Training will focus on developing suitable analytical skills	2007	1 month	$15,000
6. Analyze the new data and project them backwards for some years to provide a 'bridge' between old and new systems.	A technical report by a consultant would present method and results	2008-09	2 months	
Group E3a Total			5 mo	$29,000
E3 Business Statistics. b. Registry				
1. Develop a detailed work plan, with the help of an international consultant.		Early 2005	1.5 months for work plan & cen-	
2. Conduct a census for updating the registry. Collect data on secondary activities.		2005	sus preparation.	$60,000
3. Use census data to evaluate the extent of success or failure of annual updating prior to the census. Prepare an improved system for annual updating.		2006	1.5 month.	
4. Implement improved systems for annual updating of the registry in one oblast on a pilot basis, including registry software that will be used for recording which establishments do/do not respond to which survey.		2007		$10,000
5. Study lessons learned from implementation in a single oblast, prepare a system for implementation throughout the country, and implement.	Identify nonrespondents, to improve adjustment of data and flag possible closures.	2008-09	1.5 mo	$20,000
6. Create system for automatic exchange of information between registry and databases from each survey, with custom software operating on LAN.	Automatic identification of non-respondents and possible closures would result.	2007-09	1.0 mo	$5,000
Group E3b Total			5.5 mo	$95,000
E3 Business Statistics. c. Industry				
1. Improved estimates for informal-sector production, especially in manufacturing.	New methods needed to cover 'non-observed' activities.	2006-07	0.5 mo	$5,000
2. Review methodology of index of industrial produc-	The IMF studied the production	2005	0.7 mo.	

tion, develop method for value-added weights, separate treatment of exports, revise selection of goods, improve methods of data compilation.	index in detailed and proposed a wide range of improvements.			
3. Recalculate index based on new methods and results of special survey.		2007	0.7 mo.	
E3 Business Statistics. d. Construction				
1. Improved estimates for informal-sector construction, based on a sample of building permits for own-account building. Pilot studies needed.	Previous efforts have not yielded realistic cost estimates.	2006	1 mo 06 0.5 mo. 07	$5,000
2. Collect more comprehensive data for construction costs and use them to compute an index of construction costs.	Previous efforts have not yielded a credible result. A more suitable method may be needed.	2006-07		
E3 Business Statistics. e. International Trade				
1. Study tour to study methods for international & domestic trade statistics in another CIS country.		2005		$3000
2. Development of methodology & training for indexes of volume and prices. Re-examine mirror data from other countries and probe differences.	Training and technical paper proposing suitable methods	2006	1 mo	
3. Develop constant-price measures of imports & exports.	At present, GKS relies on a dollar measure, despite changes in the dollar's value.	2007		
4. Obtain more complete data from Customs Dept., especially as regards the number of units imported, not just for dollar value and tons.	Customs reports tons even for cars, planes, etc.	2006		
E3 Business Statistics. f. Domestic Trade				
1. Pilot survey of expenditures by retail outlets.	Up to now only sales measured. Need new questions.	2005	0.25 mo	$2000
2. Introduce modern sampling methods to reduce	Semi-annual data are collected	2005	0.25 mo	

excessive sample sizes, based on 10% rule.	from 42,000 trade estab's.			
3. Pilot surveys of non-organized activity in this sector with various approaches.	Includes imports in suitcases as well as domestic goods.	2005	0.25 mo	$5,000
4. Sample survey of energy use by enterprises	Has not been done since 1990. Useful for input-output table	2006-07	0.25 mo.	$10,000
E3 Business Statistics. g. Transport & Services				
1. Survey consumers of paid services to estimate the role of services in the non-observed economy.	Many such activities form part of the non-observed economy.	2006	1 mo - a single consultancy could	$15,000
2. Survey auto owners to estimate the value of transport services provided by informal sector.		2006	help design these 3 surveys &	$10,000
3. Survey of tourist facilities to estimate the volume of expenditures for tourism.		2006	review existing designs.	$5000
Group E3c-g Total			6.2 mo.	$60,000
E4. Agriculture and Forestry Statistics				
1. Study tour to two CIS countries to study their methods, in particular for calculating gross product in constant prices.	The division is not yet able to prepare a measure of gross product in constant prices.	2005		$6,000
2. Carry out sample survey of registered (dekhan) farmers using new questionnaire.	GKS currently tries to obtain data from all 18,000 farmers	2005	0.5 mo.	$15,000
3. Redesign program to collect useful data & eliminate unneeded data.	Most surveys were designed for sovkhoz & kolkhoz in USSR	2005	1 mo	
4. Draw new, cost-effective, samples for agriculture, using modern sampling methods.	The current sampling method (10 %) results in an uneconomic sample size of 75,000.	2006	1 mo.	
5. Review the questionnaire for small farmers and other instruments and revise them to improve coverage of agricultural production.	The existing leaves some gaps in the coverage of production, and understates some prices too.			
E5. Social Statistics, a. Demographic				

1. Child and maternal mortality rates (MDG). Develop methodology and survey techniques, as recommended by UNICEF. Pilot test questionnaire in 1 rayon.	Child rates are much understated in administrative data due to non-registration of births, deaths for infant deaths.	2005	1.0 mo	$1,000
2. Conduct survey to measure child and maternal mortality rates.	Conduct in a sample of rayons.	2006	0.5	$15,000
E5. Social Statistics, b. Labor Force				
1. Continue the quarterly labor force survey (begun in 2004), for a year to have a full picture of the results	Will measure unemployment, labor migration, gender statistics	2005	0.5 mo for sampling; 0.5 mo for methodology	$100,000
2. Evaluate the LFS data, prepare technical report. Analyze labor migration and the non-observed economy (based on hours worked).		2006		
3. Develop methodology for survey of establishments to measure earnings by profession	Such a survey has never before been conducted.	2007	1 mo	
E5. Social Statistics, c. Health				
1. Pilot study on % of women with access to reproductive health & % of population with access to clean water, and similar qualitative questions (MDG)	Need to formulate & test questions for addition to the HBS	2006	0.50 mo.	$2,000
E5. Social Statistics, d. Education				
1. Set up Interagency working group on the adaptation and implementation of the International Standard Classification of Education (ISCED)	Need to involve ministries of Labor and of Education	2005		$1,000
2. Work out the details of adaptation and implementation.		2006-07	1 mo. each in '06 & '07	
3. Seminar on ISCED		2007		$4,000

E6. Environmental statistics				
1. Work plan for environmental statistics using feasible, low-cost methods. Recommend implementation of relevant classifications.	Environmental statistics at standstill due to equipment loss	2007	1 mo	
2. Environmental survey, based on work plan		2008		$15,000
Group E4-6 Total			9 mo	$159,000

F. Improving Technical Capacity Of The Statistical System				
1. Study tours to CIS country with more advanced system to study LAN operations in statistical office.		2005		$10,000
2. Purchase of computers & peripherals				
a. HQ -- Supply 80% of staff at GKS & MCC with a computer Pentium 4 or better.	Includes printers, scanners, LAN cards as needed.	2005-09	2005 – 1 mo. to help design procurement	$370,000 equipment
b. Computerize regions. Supply each rayon & oblast with computers, printers, copiers & modems.	Will enable regional offices to enter raw data and communicate more efficiently.	2005-09		$420,000 equipment
3. Improve connections				
a. At HQ and in oblasts, develop the data transfer network and internet connections, with 9 servers and supporting switches.	Connect all PC's to LAN, each division at HQ having Web access	2005-07	2005 or 6 – 1 mo. to help configure LAN & design connectivity for regions.	$170,000
b.. In regions, develop connectivity of each oblast & rayon by modem or fax to facilitate faster, more accurate, data transmission.	Includes document processing. Connect by internet if feasible, otherwise by fax.	2006-08		$10,000 for faxes
4. Install system for internet usage for each division through LAN, with ISDL connection to Internet	Budget includes dedicated server & monthly payments for service.	2005		$18,000
5. Training for the regions in computer usage & LAN	Basic skills need to be taught, for operating systems, backups & antivirus.	2005-06		$20,000
6. Develop the software system, standardize operat-	Need to purchase licensed, up-	2005-07		$100,000

ing systems, update the system of data collection and processing, automation of document circulation	to-date applications			
7. Purchase 5 risographs and one color phaser Xerox, all with interface. Upgrade production of statistical pubs, with color graphics. Print leaflets, etc. to provide prompt information.	Existing risographs are limited in number and not available in the oblasts..	2005-06		$84,000
8. Training in LAN configuration & maintenance, including access rights, backup systems, mailboxes, shared files on server, writing software for the system	The existing LAN operates at low bandwidth.	2005-07	2006 – Initial visit of trainer 2 mo. repeat visits of 1 mo in 2007, 08, 09, develop plan for automatic processing.	$10,000
9. Training in database applications, including MS Access and SPSS. GKS & MCC will chose 1 or 2 standard database packages, to facilitate learning.	Existing processing is in Foxpro or DBS and requires specialists to prepare tables.	2006-09		$10,000
10. Automate processing of reports that are now manually processed, using standard database program.	MCC currently processes some 200 reports manually.	2007-09		$20,000
11. Upgrade central building for GKS & MCC	Building is in disrepair.	2005-09		$200,000
12. Purchase 30 low-cost autos for use by the rayon, some designed for mountain roads.	Half the rayon don't have cars; public transport not available	2005-09		$180,000
Group F Total			7 mos.	1,622,000
G. Improving The Efficiency And Effectiveness Of The Main Computing Center				
1. Look for ways to reduce burden of data collection				
a. Consultancy on methods to evaluate the usefulness of data items collected, identify unneeded ones.	GKS lacks specialists for such an evaluation.	2005-06	05- 1 mo 06 – 1 mo	
b. Evaluate the usefulness of each of the 200 reports now manually produced, identify questions and forms for elimination or reduction in frequency.	Many of these forms are inher-ited from the planned economy. Some may no longer be needed.			
2. Look for ways to improve the design of question-naires, especially for establishment surveys.				
a. Set up a working group for questionnaire design		2005		
b. Collect examples of improved questionnaires from		2005	06 – 1 mo	

other ex-Soviet republics.			07 – 1 mo	
c. Develop some standard rules and practices for questionnaires for establishment surveys, to facilitate comprehension, legibility of answers, ease of editing and ease of data entry		2006-07		
d. Redesign questionnaires for a few surveys, to provide a model for others.		2006-07		$2000
e. Extend improvements to other questionnaires		2008-09		$10,000
3. Look for ways to improve efficiency and effective-ness of data capture				
a. Study tour to 2 CIS countries to see how they auto-mated data capture in the recent past		2005-06		$6000
b. Prepare work plan for automating data capture.		2005-06	05 – 1 mo	
c. Implement the plan on a pilot basis – for at least one sample survey and one compulsory report. Implementation may include new questionnaire.	Will include data entry, editing & tabulation. Need to prepare a manual for rayon-level editors.	2006	06 – 1.5 mo	$10,000
d. Gradually implement the new system for other surveys.	Will require training in use of database applications for data entry, editing, & tabulation.	2007-09	07 – 1.5 mo 08 – 1 mo	$25,000
Group G Total			9 mo	$53,000
H. Preparations for the 2010 Census of Population				
1. Detailed work plan for census preparations, incorp-orating new technology.	GKS needs guidance in how it can upgrade its methods	2006	0.7 mo.	
2. Detailed planning for IT aspects of Census, including GIS and data capture	Mapping and data capture need to be automated.	2007	1 mo.	
3. Training in census operations, taking into account new technologies to be applied.	Some operations will need to be modified	2008	1 mo	$2,000
4. Preparing census maps using GIS.				
a. Purchase of high performance workstations, large format printer, GIS software, 100 GPS units.	Before 2000 census, mapping was done manually.	2008		$40,000

b. Purchase of satellite imagery, especially for cities.		2008		$60,000
c. Study tour to another CIS country to observe use of GIS software for preparing Census maps		2008		$6,000
d. Training in use of GIS Software		2008,09	08 – 1.5 mo 09 – 1 mo	$2,000
e. Field work for preparation of maps plus map preparation using GIS.		2006-09 mostly 08		$112,000
5.. Data capture				
a. Purchase of a high speed scanner with OCR software such as Teleform, to study use of this technology in Tajikistan.	May be suitable for replacing manual data entry, which required 80 staff in 2000	2008		$25,000
b. Training in use of the scanner, programming for data capture, and planning of the work flow.		2008-09	08 – 0.7 mo 09 – 0.7 mo	$2,000
c. Training in use of CS Pro or another suitable program for preparing census tabulations.		2008-09	08 – 0.7 mo 09 – 0.7 mo	$2,000
6. Purchases of computer and printing equipment for the census, not elsewhere classified		2006-09, mostly 09		$203,000
7. Cost of programming for census and related office activities		2006-09 mostly 08-09		$112,000
8. Pilot census in 2008		2006-09, mostly 08		$79,000
9. Other census preparations		2006-09		$154,000
Group H Total			8 months	$799,000
I. Monitoring the Implementation of the MISP				
1. Establish working group for monitoring the implementation of the MISP. Issue annual reports.	Include several staff of GKS & MCC, plus 1-2 outsiders.	2005		$2,500
2. Annual seminar to review implementation of MISP	Include staff from GKS, MCC & regions.	2005-09		$20,000
3. Progress Review & Adjustment to Plan after 1	Consultant would work with	2006	1 month	

year, taking funding delays and linkages into account.	WG.			
4. Mid-term Progress Review & Adjustment to Plan after 3 years.		2008	1 month	
Group I Total			2 months	$22,500
GRAND TOTAL			115.2 mo	$3,115,000