

**SOCIAL INDICATORS AND SOCIAL POLICY ANALYSIS SYSTEM
FOR BOLIVIA**

(TC-95-02-46-1)

EXECUTIVE SUMMARY

REQUESTER: Republic of Bolivia

EXECUTING AGENCY: Instituto Nacional de Estadísticas [National Statistics Institute] (INE)

BENEFICIARIES: Instituto Nacional de Estadísticas (INE), Unidad de Análisis de Política Económica [Economic Policy Analysis Unit] (UDAPE), and Unidad de Análisis de Políticas Sociales [Social Policies Analysis Unit] (UDAPSO)

FINANCING: IDB
(FSO net income/nonreimbursable/
foreign exchange): US\$1,000,000
Local contribution
(cofinancing resources): US\$ 500,000
Total: US\$1,500,000

TERMS: Execution period: 36 months
Disbursement period: 42 months

**ENVIRONMENTAL
CLASSIFICATION:** The Environment Committee, at its meeting of April 6, 1995, classified this as a Category II operation.

OBJECTIVES: The objective of the program is to support the development of the social indicators system (SIS) in order to facilitate the evaluation of the impact that the country's economic and social policies have on the levels of poverty and welfare of the population.

DESCRIPTION: To accomplish the proposed objective, the program would comprise the following components:

1. Creation of a data bank and publication of the social statistics to be produced.
2. Construction of a social accounting matrix (SAM) that integrates economic and social data.
3. Design of a general equilibrium model (GEM) which, based on the SAM, will be used to evaluate the degree of effectiveness and impact of the country's economic and social policies on the levels of poverty of the population.

4. Implementation of training programs consisting of courses on theory and training in the use of indicators and social accounting systems.

BENEFITS:

The main benefits of the program would be: (i) availability of consolidated social indicator and social accounting systems; (ii) availability of better analytic instruments for defining and evaluating social policies; and (iii) existence of institutions (INE, UDAPSO and UDAPE) capable of identifying, monitoring and evaluating poverty and measuring the impact of the country's economic and social policies.

RISKS:

The complexity of the program could constitute a risk factor in terms of its execution and sustainability. More specifically, it is possible that: (i) the primary data required to properly feed the SIS may not be generated on a timely and continuing basis; (ii) all the program components, particularly those involving the GEM, may not be properly executed and consolidated; and (iii) qualified and trained staff may leave the agencies responsible for management of the program.

Efforts will be made to minimize such risk factors through: (i) the successive development of the components of the SIS, the SAM, and the GEM, while making sure that in any case the least complex components are consolidated; (ii) the preparation of technical manuals; and (iii) wider dissemination of social data with the intent of consolidating demand on the part of users and expanding political acceptance of the activities supported by the program.

**THE BANK'S
COUNTRY STRATEGY:**

The strategy established with Bolivia stresses that the Bank will assign priority to supporting programs and projects conducive to: (i) promotion of sustained development by supporting structural reforms, encouraging investment and raising productivity; (ii) promotion of State reform and decentralization; (iii) improvement of social conditions through investments and reforms in education, health and housing, especially at the basic care level, that benefit the lowest-income groups; (iv) improvement of the quality and impact of projects by applying the policy of equal opportunity for men and women; and (v) maintenance and restoration of the environment.

The actions and activities envisaged under this program are consistent with such priorities, since they contribute to reform of the State by enabling it

to have better information systems for analyzing poverty conditions and measuring the impact of the country's social policies and programs.

PROCUREMENT:

Procurement of goods valued at US\$250,000 and above will be handled by means of international competitive bidding. No works contracts are envisaged.

**SPECIAL
CONTRACTUAL
CONDITIONS:**

The disbursements from the proposed financing would be subject to fulfillment, to the Bank's satisfaction, of the following requirements:

1. That a participation agreement has been signed by INE, UDAPE and UDAPSO for execution of the program activities and that the technical council has been created in INE.
2. That the professionals needed to assist INE's Deputy Director of Social Statistics in administering the program have been assigned.
3. That a work plan and a schedule of activities for the first year of execution of the program have been submitted.
4. That the resources necessary to cofinance the program have been allocated, through the signature of a funds administration agreement between the Bank and the cofinancing source or through any other resource transfer mechanism acceptable to the Bank.

I. BACKGROUND

A. General situation

- 1.1 The economic crisis that struck the Latin American and Caribbean countries in the 1980s not only brought to light the structural deficiencies that had characterized the region's economic development, but also aggravated the preexisting social problems such as critical poverty, obstacles to human resource development, and insufficient social mobility and cohesion.
- 1.2 In recent years, some countries of the region have posted a noteworthy economic recovery, but this has not yet led to substantial improvements in the social problems. The formulation of economic and social policies that combine sustained economic growth with reduction of absolute poverty and greater equity and social mobility is therefore a matter of urgency.
- 1.3 The design of such policies and monitoring of their efficiency requires a better understanding of the magnitude and characteristics of the segment of the population that lives in poverty and of the structural causes of these conditions. To obtain this understanding it is essential that the countries of the region have information systems and analysis methods that will enable them to conduct the diagnostic studies that are needed, in a reliable and up-to-the-minute fashion, as well as focusing on resource allocation.

B. The Bolivian case

- 1.4 Regarding information systems and analysis methodology, Bolivia has produced a significant quantity of data on the living standards and socioeconomic characteristics of its population. However, a review of the quality of this data led to the conclusion that it is sadly lacking in consistency, comparability, coverage, timeliness, and up-to-date social statistics. Moreover, the integration between the social and economic statistics is deficient and there is no analytic framework for relating the changes in economic and social policies to the poverty indicators.
- 1.5 The statistics produced in Bolivia suffer from, inter alia, the following problems: (i) the analyses are made in respect of very short historical periods; and (ii) the supply of primary statistics does not always permit proper comparability of the data over time. In general terms, it can be affirmed that no reliable, systematic information and analysis concerning the population's living conditions and the social welfare indexes can be said to exist, their importance notwithstanding.
- 1.6 The foregoing, combined with the importance that the government currently assigns to human development within the economic

development process, has served to underscore the need to establish and consolidate modern information systems in Bolivia to make it possible to monitor, evaluate and adjust national, regional and municipal programs.

- 1.7 Experience in other countries has shown that social data systems are neither practical nor sustainable unless they are developed together with data quality control mechanisms and analysis instruments for policy design and follow-up. For this reason and as a result of the above-mentioned circumstances relevant to the Bolivian case, it is necessary to develop systematized methods and mechanisms for verifying and consolidating the primary information that will permit: (i) effective verification of its consistency (ii) integration of the information to enable measurement of the different dimensions of poverty; (iii) its consolidation with the economic statistics; and (iv) use of the social data for analytic purposes.

C. Present situation

- 1.8 In April 1993, the first seminar/workshop was held that combined all the institutions generating and using social information. It was established that, besides the deficiencies noted, the widely scattered nature of the different sources, which generate and disseminate social data but are not consistent with each other because they use differing methodologies and coverage tends to confuse users. The purpose of the second seminar/workshop, held in February 1994, was to define the operation of a social indicators system (SIS) (see Annex I), within the spirit of Law 14100 and Decree Law 16686 (Law on the National Statistical Information System and Law on the Departmental Statistical Information Subsystem, respectively).
- 1.9 In previous years, UDAPE and academics in Bolivia accumulated a certain amount of experience in the use of two of the analytic instruments that are expected to be developed through this program, in particular the social accounting matrix (SAM) and the general equilibrium models (GEMs). The program will try to gather and update this experience and develop it through a more systematic and institutionalized effort.
- 1.10 The program described below will be designed to consolidate the SIS and strengthen the institutional and analytic capacity of the National Statistics Institute (INE), the Social Policies Analysis Unit (UDAPSO) and the Economic Policy Analysis Unit (UDAPE), so that they will be able to run the SIS properly and, at the same time, make the social statistics and methodologies for evaluation and monitoring more accessible to the other government departments and the private sector (NGOs) interested in resolving social problems.

D. Participation of the Bank and other international agencies

- 1.11 The World Bank has helped the Bolivian government, particularly INE and UDAPSO, in the strengthening of social statistics and their analysis. Between 1988 and 1992, the World Bank assisted the Integrated Household Surveys (IHS) and, more recently, starting last year, it began supporting the implementation, through INE and UDAPSO, of special surveys designed to evaluate the impact of Social Investment Fund (SIF) programs and the diagnostic study and evaluation of a child welfare program.
- 1.12 The proposed program would complement the activities funded by the World Bank since it is aimed at improving the use of the IHS for policy purposes and facilitating the development of analytic criteria for upgrading survey quality. The results of the SIF-related surveys and the child welfare program would also constitute valuable inputs for the proposed program.
- 1.13 The Bank, in collaboration with the World Bank and the Economic Commission for Latin America and the Caribbean (ECLAC), is developing a regional program for improving the Surveys of Living Conditions in Latin America and the Caribbean (ISLC/LAC). If Bolivia were to be included as one of the beneficiary countries under said program, this would be an important adjunct to the proposed program in that the sources of data that are central elements in the preparation of social indicators would be strengthened.

II. OBJECTIVE AND DESCRIPTION

A. Objective

- 2.1 The main objective of the program is to support the development of the social indicators system (SIS) in order to facilitate the evaluation of the impact that the country's economic and social policies have on the levels of poverty and welfare of the population, through the creation of a data bank, the social accounting matrix (SAM), the general equilibrium model (GEM) and technical training for the personnel involved in the system.

B. Description

- 2.2 Development of the SIS will require: (i) establishment of a conceptual and analytic framework of social indicators that will make it possible to interrelate the different dimensions of the population's quality of life and facilitate analysis of the indicators in a logical sequence, so that the heterogeneity and multiple causes of poverty can be described and understood; (ii) development of an analytic framework for integrating economic

and social statistics; (iii) development of an analytic framework for analyzing the impact of economic and social policies on the population's living conditions; and (iv) training programs to improve the technical, institutional and operating capacity of the institutions that generate, gather, analyze and publish social statistics (INE, UDAPE and UDAPSO).

- 2.3 In light of the preceding considerations, in order to achieve its proposed objective the program would comprise the following four components:

1. Creation of an SIS data bank (US\$657,450)

- 2.4 The indicators forming part of the data bank should, as a minimum, cover the following: (i) sex; (ii) age; (iii) other socio-demographic characteristics; (iv) occupational group; and (v) geographic location. The desirable and feasible itemization of indicators according to these characteristics will be defined as part of the first step in setting up the SIS. Preliminary details on possible social indicators are presented in Annex II.

- 2.5 The activities included in this component would be:

- (i) identification and definition of the indicators to be included in the system;
- (ii) updating of the inventory of available information sources and comparison of definitions and methodologies; 1/
- (iii) establishment of working relations with the agencies supplying the primary data (administrative registers, INE divisions, etc.) in order to coordinate methodologies and ensure a smooth flow of data to INE's Social Statistics Directorate;
- (iv) preparation of a series of SIS indicators for 1970 to 1995, based on available data;
- (v) preparation of technical reports on the quality of the data with recommendations for improvement of surveys, censuses and administrative registers;

1/ In 1992, a preliminary inventory was made in preparation for the formulation of this project, with IDB financing and technical support from the Institute of Social Studies of The Hague; this inventory was published in *Hacia un Sistema de Indicadores Sociales para América Latina - Informe de Bolivia* [Towards a social indicators system for Latin America - Bolivian report], IDB-ISS [Institute of Social Studies], La Paz, November 1992.

- (vi) generation of an SIS data bank and diskettes by means of which the information will be accessible to external users;
- (vii) maintenance and updating of the SIS information as an ongoing INE activity; and
- (viii) creation and publication of the *Coyuntura Social* [*Current Social Trends*] review, in which the SIS methodology will be published, its results presented and the quality and consistency of the data discussed. 2/

2.6 This component would require the contracting of 45 months of international consulting services and 18 months of local consulting services. INE would be responsible for its execution, for which purpose it would allocate 318 staff-months from its permanent staff. UDAPSO would collaborate with INE (36 staff-months) in the technical definition of this component. This contribution will be valued at US\$228,900 during execution of the program.

2. Social accounting matrix (US\$171,050)

- 2.7 Social accounting constitutes an extension of the national accounts system. Application of the social accounting matrix (SAM) method will utilize the properties of the matrix form to incorporate specific details on various economic flows. Traditionally, this method has been used primarily for analyzing the causes and consequences of various aspects of the inequality between groups of households.
- 2.8 The present social accounting method forms an integral part of the revised United Nations national accounts systems (Revision 4, chapter XX). The SAM can be incorporated into this system for identifying income and expenditure flows between sectors, households, institutions and the rest of the world, with satellite tables that provide nonmonetary data such as the structure of employment, sociodemographic data, consumption in terms of volume and (in the case of food) nutrition content, and other information connected with the welfare of the population measured, such as financial stocks and data on availability and quality of natural resources (environmental accounts).
- 2.9 The purpose of social accounting is to link economic and social statistics. This makes it possible to make the various information

2/ This review, being an ongoing publication, will create its own demand and thereby justify its existence. INE's publishing experience will be a valuable resource for its publication, in conjunction with the budget appropriations allocated for the purpose.

sources such as the national accounts, household surveys and family budgets, financial statistics, the input-output matrix and the social indicators consistent. Analysis of the discrepancies found should lead to recommendations for improving the primary information. In recent years, INE has been conducting and has scheduled new economic and sociodemographic censuses and surveys (including greater coverage of agricultural and rural sectors), thereby increasing the feasibility of constructing the SAM.

- 2.10 The SAM in turn provides an analytic instrument for study of the structure of the economy and can serve as an initial basis for GEMs.
- 2.11 The activities included in the construction of a social accounting system for INE would be the following:
 - (i) designing a social accounting system (consistent with the United Nations national accounts system guidelines), including the SAM, in the form of modules of the following: (i) output; (ii) factor distribution and distribution of income between households and institutions; (iii) private and public consumption accounts; (iv) capital and financial accounts; and (v) external accounts and balance of payments;
 - (ii) making satellite tabulations that would include as a minimum: (i) employment matrixes; (ii) sociodemographic matrixes of groups of households (sex, education levels, poverty indicators, etc.); (iii) nutrition matrixes; (iv) matrixes of fixed capital and financial stocks. In a later stage the following could be added: (v) environmental accounts; and (vi) public social expenditure distribution accounts.
 - (iii) defining the classification system;
 - (iv) analyzing the economic and social structure on the basis of the SAM;
 - (v) preparing a methodological paper on the design, construction and reconciliation of the SAM and the satellite tabulations;
 - (vi) preparing guidelines and recommendations for the construction of social accounts for a new base year;
 - (vii) preparing and maintaining a database for the construction of the social accounts (integrated with the national accounts and the SIS).

- 2.12 Execution of this component would require contracting of 15 months of international consulting services and five months of local consulting services. UDAPE and UDAPSO would provide 14 and 36 staff-months, respectively, from their permanent staff. This contribution would be valued at US\$94,800 during the execution of the program.

3. General equilibrium model for policy analysis (US\$145,950)

- 2.13 A general equilibrium model will be developed that will seek to identify the interrelationships between the different markets and economic sectors. In past years and up until 1991, UDAPE had developed a GEM based on an SAM. UDAPE currently has a macroeconomic consistency model. The program will update the first experience and strengthen current work with a model of the overall economy, including the real sector of the economy, aspects of income distribution and some segments of the social area. The results of the SIS and of the SAM would serve as the basis for preparing the model, which would be used in the evaluation of the social and economic policies.
- 2.14 Execution of this component would require contracting of 15 months of international consulting services and four months of local consulting services. UDAPE, which will be responsible for this component, and UDAPSO would assign 14 and 24 staff-months, respectively, from their permanent staff, at an estimated cost of US\$57,000.

4. Training (US\$525,550)

- 2.15 The training would be conducted at two levels. The first level would consist of training of personnel at INE and at the institutions that will prepare the basic statistics.
- 2.16 These training courses would be held both in the city of La Paz and in other parts of the country and would be intended for:
- (i) staff of INE, ministries, national secretariats, decentralized agencies and research centers (central level);
 - (ii) staff of local agencies involved in planning and executing social programs, and of municipalities and NGOs (decentralized level);
 - (iii) university researchers.
- 2.17 The second level would consist of training courses for the staff of the institutions connected with the implementation of the program on the SAM, GEMs and use and interpretation of the instruments and results of the program in policy management.

2.18 The training courses would consist of at least two modules:

- (i) Basic analysis and evaluation methods
 - a. Basic mathematics
 - b. Statistics and explorative data analysis
 - c. Applied econometrics (package management)
 - d. Sampling and survey analysis
 - e. National accounts
- (ii) Applied analysis techniques and evaluation of the SIS
 - a. Theories of welfare and distribution. Concepts and measurements of poverty
 - b. Construction and use of socioeconomic accounts (SAM)
 - c. Design and evaluation of socioeconomic programs and policies (macroanalysis)
 - d. Design and evaluation of social projects (microanalysis)
 - e. Home economics models and time distribution in the home.

2.19 INE, UDAPSO and UDAPE would devote 150, 27 and eight staff-months to this component, respectively, from their permanent staff, at an estimated cost of US\$135,000. Conducting the courses in the fields mentioned would require 19 months of international consulting services and three months of local consulting services.

2.20 The program includes funding for training abroad of eight staff members of the institutions involved with its implementation.

III. EXECUTION

A. Institutional structure

3.1 The chief institutions participating in the program would be: (1) INE and UDAPE, which are attached to the Ministry of Finance; and (2) UDAPSO, which is part of the Ministry of Human Development. In general, all the public and private institutions that generate information will be required to adhere strictly to Law 14100, which specifies that INE is the institution authorized to monitor the country's information and make it official.

- 3.2 INE was restructured at the beginning of the current year, with its Social Statistics Department being upgraded to the subdirectorate level to enable it to undertake macro- and interinstitutional projects such as the one under consideration (see Annex IV). The new subdirectorate is made up of two departments: (i) the Social Statistics Department, which will be responsible for compiling and analyzing the basic social statistical data derived from official registers, censuses and surveys; and (ii) the Social Indicators Department, which will implement the SIS and construct the satellite tables of sociodemographic variables that will form part of the SAM.
- 3.3 UDAPSO has a database department that will coordinate all the activities concerning the SIS and will be the main user of the data generated thereby (see Annex IV).
- 3.4 UDAPE, the government agency responsible for economic analysis in Bolivia, considers it necessary that the social component be included, which means that the economic data must be comparable and methodologically compatible with the social data. UDAPE will use the information from the SIS and the SAM in preparing macroeconomic models that meet the government authorities' expectations. UDAPE will employ a team of over 20 professionals for this purpose (see Annex IV).

B. Execution mechanism

- 3.5 The program would be executed by INE, through its Subdirectorate of Social Statistics, which would be responsible to the Bank for implementation of the program. The administration of the program will require as a minimum that experienced professionals (a technical assistant with extensive accounting expertise and a secretary) be assigned to the Deputy Director of Social Statistics from the institution's professional staff.
- 3.6 The program would have a technical council, made up of the directors of INE, UDAPSO and UDAPE, which would coordinate, define and approve the basic approaches of the entire technical process involved.
- 3.7 In terms of the main program components, INE would be responsible for the SIS, the SAM and training. UDAPE would be in charge of developing the GEM. In addition, UDAPSO and UDAPE will participate in the design and structuring of the SAM and will develop methods for evaluating the impact of social and economic policies and their application using the new database.
- 3.8 Because of the importance of coordinated participation by INE, UDAPE and UDAPSO to successful implementation of the program, it is recommended that prior to utilization of the funds from the prospective financing: (i) participation agreements be concluded between the three institutions for execution of the program

activities; (ii) the technical council referred to in paragraph 3.6 be formed and put into operation; and (iii) the professionals who will support INE's Deputy Director of Social Statistics in administering the program be assigned. 3/

- 3.9 The Bank views the social indicators and social policy analysis system (SISAPS) as a pilot program that it hopes can be replicated in other countries of the region. Accordingly, close technical monitoring of its progress and the development of the methodologies applied is recommended. This monitoring would be performed by the Bank's technical staff, requiring assignment of a total of eight weeks.

C. Execution period and schedule of activities

- 3.10 The execution period would be 36 months, with a 42-month disbursement period for the technical cooperation funding, counting from the effective date of the technical cooperation agreement. Because of the desirability of having a detailed work plan right from the start of the operation, it is recommended that, as a condition precedent to the use of the funds from the prospective financing, the government, through the executing agency, submit to the Bank an initial work plan that includes the detailed terms of reference for each of the consultants to be retained and for the procurements to be effected. Annex V presents the general terms of reference for the external consultants.
- 3.11 The program activities would be carried out simultaneously, but the start of each activity would be sequenced according to its level of complexity. Implementation of the SIS data bank would be the first step. Preparation of the SAM will be started at the end of the first year of the program and adaptation of the GEM in the middle of the second year. The training courses will be run in each year. The schedule is presented in Annex VI.

D. Procurement of goods and consulting services

- 3.12 Goods procurement (no works contracts are anticipated) will be carried out in accordance with the procedures laid down in Annex B to the loan contract. Consulting services will be contracted in accordance with the Bank's standard procedures as set out in Annex C to the loan contract. International competitive bidding will be required for procurement of goods valued in excess of US\$250,000. These limits are justified by the fact that in similar projects in Bolivia foreign suppliers are prepared to bid when the amounts are above said level. Bidding for items valued below the threshold set will be conducted in accordance with Bolivian legislation, provided it is compatible with the Bank's procedures.

3/ The functions and responsibilities of each of the participating institutions are detailed in Annex III.

E. Budget and financing

- 3.13 The total cost of the program is estimated at US\$1.5 million, as broken down below, with the sources of financing as shown:

Table of Costs
(US\$)

	IDB	LOCAL CONTRIBUTION NETHERLANDS	TOTAL
SIS data bank	432,850	224,600	657,450
SAM	97,050	74,000	171,050
GEM	74,450	71,500	145,950
Training	395,650	129,900	525,550
Total	1,000,000	500,000	1,500,000

- 3.14 The Netherlands' grant would be in the amount of US\$500,000 equivalent, and would be provided through a funds administration agreement with the Bank. The Netherlands would transfer these funds to the Bank in two installments of US\$250,000 in the first month of the first and second years of program execution. Disbursements from the proposed financing would be subject to signature by the Bank of a funds administration agreement in respect of the funds allocated to the program by the Netherlands.
- 3.15 INE, UDAPSO and UDAPE would contribute 504, 123 and 36 staff-months respectively, from their permanent staff, to the program, at an estimated cost of US\$515,700 equivalent.
- 3.16 To give a clearer picture of the use of the resources, the following two tables present details of the costs per component and the disbursement schedule, respectively.

Table of Costs per Component
(US\$)

	SIS DATA BANK	SAM	GEM	TRAINING	TOTAL	
					US\$	%
1. Consultant	306,000	100,000	98,000	112,000	616,000	41.1
1.1 International	270,000	90,000	90,000	106,000	556,000	37.1
1.2 National	36,000	10,000	8,000	6,000	60,000	4.0
2. Travel and per diems	139,600	26,450	18,950	154,800	339,800	22.7
3. Mat. and Equipt.	145,750	26,300	14,000	210,550	396,600	26.4
4. Contingencies	66,100	18,300	15,000	48,200	147,600	9.8
Total	657,450	171,050	145,950	525,550	1,500,000	100
% of Total	43.8	11.4	9.7	35.0	100	

3.17 The fees of two international consultants hired during the three years of the program (an average of US\$6,000 per month each), who would be involved in all the program components, would account for 78% of the expenditure on international consulting services. Two thirds of these expenditures would be covered by the Netherlands' grant. The other US\$124,000 would defray the cost of 22 months of short-term consultants for specific activities in each component. The materials and equipment item includes printing costs (US\$66,000); purchase of 25 computers (US\$87,500), 12 printers (US\$13,600) and one photocopier (US\$4,500); leasing and computer services for the training courses (US\$140,000); and other materials and supplies (US\$87,300). Under travel and per diems, US\$92,000 relates to study abroad grants, US\$135,000 to travel and subsistence in Bolivia, and US\$78,400 to travel for national and international consultants. 4/

Disbursement Schedule
(US\$)

	YEARS			TOTAL	
	1	2	3	US\$	%
IDB	471,000	280,700	248,300	11,000,000	66.7
Local contribution: The Netherlands	166,700	166,700	166,600	500,000	33.3
Total	637,700	447,400	414,400	1,500,000	100
%	42.5	29.8	27.7	100	

4/ For more information, detailed budget tables are available in OD2.

F. Monitoring and evaluation

3.18 To enable monitoring of the progress of the program activities, INE, through the executing unit, will be responsible for submitting the following reports to the Bank:

1. Progress reports: to be produced every six months throughout the program execution period. These reports will contain details on the degree of fulfillment of the planned activities, as set out in the schedule of activities (Annex VI) and logical framework (Annex VII). The first copy of the *Coyuntura Social* review is to be published 18 months after the start of program execution.
2. Plan of activities for the second and third years: based on the semiannual reports, and within the first three months of the second and third years of program execution, a report setting out the activities and actions to be carried out in the following year.
3. Audited annual reports: throughout program execution, within the first three months of each calendar year, INE will submit to the Bank, through the executing unit, an annual financial report on the funds used in the program, audited by auditors acceptable to the Bank.

IV. BENEFITS AND RISKS

- 4.1 The main benefits of the program would be: (i) availability of consolidated social indicators and social accounting systems; (ii) availability of better analytic instruments for the definition and evaluation of social policies; and (iii) existence of institutions (INE, UDAPSO and UDAPE) capable of identifying, monitoring and evaluating poverty conditions and measuring the impact of the country's economic and social policies.
- 4.2 The complexity of the program could constitute a risk factor in terms of its execution and sustainability. More specifically, it is possible that: (i) the primary data required to properly feed the SIS may not be generated on a timely and continuing basis; (ii) because of their analytic complexity, all the program components, particularly those involving the GEM, may not be properly executed and consolidated; and (iii) the turnover of qualified and trained staff could endanger the medium-term sustainability of the program. Efforts will be made to minimize such risk factors through: (i) the successive development of the components of the SIS, the SAM, and the GEM, while making sure that in any case the least complex components are consolidated; (ii) the preparation of technical manuals, to increase the likelihood that

the experience supported by the program can be duplicated and sustained; (iii) the effective dissemination of improved social data with the intent of generating more targeted demand for such data on the part of users, thereby expanding political acceptance for sustaining the activities supported by the program; and (iv) Law 14100 and Decree Law 16686, which will provide the legal framework for operation and maintenance of the SIS.

**BRIEF DESCRIPTION OF THE BASIC CONCEPTS PROPOSED FOR A
SOCIAL INDICATORS SYSTEM 1/**

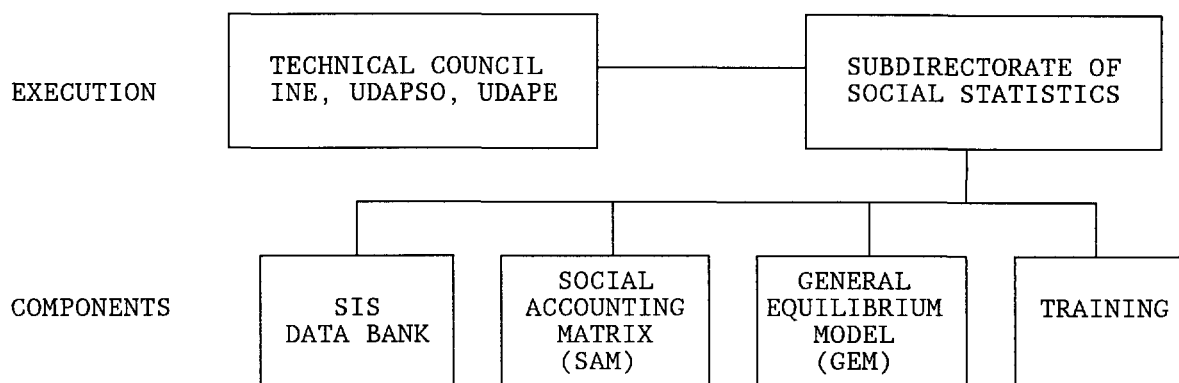
- A.1 The SIS is based on an analytic framework by means of which the different databases and indicators can be systematically integrated. This will make it possible to note their inconsistencies, gaps in the information and differences in the timeliness and disaggregation of the data. This diagnosis can then be used in planning the requirements for social statistics development in a more objective manner.
- A.2 Comparison of the SIS's requirements with the information used in Bolivia reveals that there is a considerable degree of conceptual and methodological consistency. In this respect, this is not a proposal that duplicates efforts already under way. The SIS proposal does, however, represent a great advance vis-à-vis the experience in the design and application of social indicators in Latin America. The fact is that the SIS, instead of working with compound poverty indexes or, at the other end of the scale, with indicators isolated by social sector, offers an integrated analytic framework for interrelating the different dimensions of the quality of life of the population. In addition, the breakdown of the social indicators into categories, i.e., *output, input and access indicators*, constitutes a logical sequence for describing and understanding the heterogeneity and multiple causes of poverty, while their integration into a *social accounts system* makes it possible to link the social problems with problems of sector development in the economy and of macroeconomic adjustment. In this respect, the SIS is a necessary complement for development and improvement of Bolivia's existing social data systems.
- A.3 The analytic framework distinguishes two complementary methods for diagnosis and monitoring: (1) the income method, and (2) the basic needs method.
- A.4 The actual design of the indicators is based on three categories, which correspond to the logical sequence and linkage among them:
- output indicators
 - input indicators
 - access indicators

1/ See R. Vos (1992), *Hacia un sistema de indicadores sociales para América Latina* [Towards a social indicators system for Latin America], Washington and The Hague, IDB and Institute of Social Studies, for more details.

The output indicators identify the standard of living reached; the input indicators refer to the resources available for meeting basic needs; the access indicators identify the factors that facilitate or obstruct access to those resources.

- A.5 These indicators are determined, for the moment, in five basic social sector areas: *nutrition, education, health, housing and social security*.
- A.6 The indicators and variables described in Annex II are derived from different sources. In addition, the various structures produce complementary data that will be analyzed and recorded in accordance with the SIS's guidelines; among others, mention can be made of the information from projects such as the comprehensive child development program (PIDI), the national demographic and health survey (ENDSA), the Social Investment Fund, the National Regional Development Fund (FNDR), and others. In brief, the SIS, by integrating institutions that produce statistics and guiding the approaches followed and the conceptual framework of variables and indicators, will require and progressively generate new data that will expand and enrich the body of basic indicators.
- A.7 The joint application of the two methods and the design and application of the three categories of indicators in the five areas will be integrated into a structured system of social accounts known as social accounting matrixes (SAMs). The SAMs perform two functions: (1) they serve as a basis for verifying the consistency of the existing statistical data in the social and economic areas; and (2) they enable the development of quantitative models for simulating the impact of social and economic policies on living standards.

**PARTICIPATION AGREEMENT (RESPONSIBILITIES)
PROPOSAL FOR EXECUTION OF THE SISAPS PROGRAM**



The assignments and responsibilities of the institutions involved in the program are:

a. Instituto Nacional de Estadísticas [National Statistics Institute] (INE):

- (i) member of SISAPS technical council;
- (ii) general and technical coordination of the program;
- (iii) financial administration of the program;
- (iv) responsible for the SIS, the SAM and training; 1/

1/ INE, through its Training Division, maintains relations with international organizations and institutions that periodically offer basic and advanced training courses. It is important to note attendance at international courses and workshops on: household surveys, employment, poverty, demography, etc. For 1995, as was done in preceding years, an internal training program was set up for each subdirectorate, with a view to upgrading the technical capabilities of the institution's staff; the courses included: administrators and development of database applications, file organization, graphics, sampling techniques, surveys and cartography, management of econometric packages. This demonstrates that INE is able to organize training events. Since it is also responsible for national census activities and research such as the integrated household surveys, INE runs a set of short and long courses and seminars which give it a comparative advantage for organizing and monitoring events of this type.

- (v) participation in the definition and construction of poverty indicators; and
 - (vi) for all purposes, INE will coordinate the different actions with UDAPSO and UDAPE. Subject to approval of the three institutions, INE, in its capacity as administrator of the program, is empowered to take such steps as it deems appropriate vis-à-vis the national authorities and financing agencies.
- b. Unidad de Análisis de Políticas Sociales [Social Policies Analysis Unit] (UDAPSO):
- (i) member of SISAPS technical council. Participates actively in the technical definition of the different phases of SISAPS implementation, in conjunction with INE and UDAPE;
 - (ii) analyzes the information from the SIS in order to formulate and evaluate the social policies; and
 - (iii) participates in the design and structuring of the SAM.
- c. Unidad de Análisis de Política Económica [Economic Policy Analysis Unit] (UDAPE):
- (i) member of SISAPS technical council. Participates actively in the technical definition of the different phases of SISAPS implementation, in conjunction with INE and UDAPSO;
 - (ii) participates in the design and structuring of the SAM;
 - (iii) analyzes the information from the national accounts system, the SIS and other socioeconomic indicators in order to formulate and evaluate economic policies; and
 - (iv) designs, structures and constructs models for:
 - (i) evaluation of the effectiveness and impact of the country's economic and social policies; and
 - (ii) situation analysis and design of policy simulation scenarios.

SCHEDULE OF ACTIVITIES

Activities	YEAR 1 quarters				YEAR 2 quarters				YEAR 3 quarters		
	1	2	3	4	1	2	3	4	1	2	3
Activities					E				E		
consultants	E										
	E	E	E	E	E	E	E	E	E	E	E
ounting (M)				E	E	E	E	E	E	E	E
uilibrium)							E	E	E	E	E
ourses			E				E				E
reports			E		E		E		E		E
monitoring	S				S				S		

= Executing Unit; S = responsible IDB staff

CONCEPTUAL FRAMEWORK OF THE SISAPS PROJECT: ACTIVITIES AND EXPECTED RESULTS

DIAGNOSIS	THE PROJECT	INDICATORS	MEANS OF VERIFICATION (Verification to be done every six months from the start of the project to its completion)	ASSUMPTIONS
<p>LEM: In Bolivia inefficiencies persist in consistency, compa- rability, coverage, timeli- ness of updating of social indicators. There is also poor integration between social and economic indicators, and an analytic framework is lacking for assessing the changes in the structure of the economy and variations in the social indicators.</p> <p>In general terms, it can be said that, notwith- standing their importance, no reliable information is available and automatic analyses have not been made of the population's conditions and social indexes, comparable with the body of information analysis available for decision-making in the social sphere.</p>	<p>OBJECTIVE: (i) To arrive at an improved system of social indicators that will make it possible to refine the design of social policies and the evaluation of their effec- tiveness and efficiency in promoting economic and social development with greater equity in the country; and (ii) to improve the insti- tutional capacity for managing and maintaining the social indicator system.</p>	<ul style="list-style-type: none"> - Publications with reliable, timely and precise data on social indicators from the SIS and policy studies and analyses using these data. - Assignment of a sufficient number of local personnel for implementation and mainte- nance of the SIS and connected instruments. - Use and application of the SIS to various levels of execution of social policies. 	<ul style="list-style-type: none"> - Publications and documents generated by the project. - Budget of INE, UDAPSO and UDAFE. - Progress reports. 	<ul style="list-style-type: none"> - Establishment of institutional coordinat- ing mechanisms to supply and improve social data into account the pro- ject's recommendations for the primary data. - Commitment of the authorities to assign adequate resources to generating the primary data, thereby enabling tim- ely production of the new data.

DIAGNOSIS	THE PROJECT	INDICATORS	MEANS OF VERIFICATION (Verification to be done every six months from the start of the project to its completion)	ASSUMPTIONS
DIAGNOSIS: Lack of nt and reliable data population's living ns. Lack of s among analysts of al situation on ents of the living ns. Low use of the data for design and on of social programs cies in the country.	PURPOSES: (i) To provide social statistics that are consistent and comparable over time, and are timely and relevant for the decision- making process. (ii) To establish appropriate methods for verifying the quality of the data. (iii) To improve the database and capacity for analyzing the interrelationships between economic and social policies. (iv) To make the information more readily accessible.	<ul style="list-style-type: none">- Production of time series of social indicators. - Methodologies published- User manuals - Development and use of the SAM and GEM - Number of agencies making use of the SIS (publications and electronic data) and intensity of use - SIS production contingency period	<ul style="list-style-type: none">- Project documents and progress reports - Project documents and progress reports - Project documents and progress reports - Progress reports	See above.

DIAGNOSIS	THE PROJECT	INDICATORS	MEANS OF VERIFICATION (Verification to be done every six months from the start of the project to its completion)	ASSUMPTIONS
<p>CAUSES:</p> <p>of an integrated f social indicators. fficient knowledge of pply methods for g better integration l and economic cs. fficient knowledge ititutional capacity cting systematic control of the social</p> <p>of interinstitu- oordination in the on and analysis of statistics. of capacity in the gencies for utilizing yzing the existing ion for the design, ng and evaluation of and programs. ciencies in dissemi- f the data.</p>	<p>COMPONENTS:</p> <p>(i) System of social indicators</p> <ul style="list-style-type: none"> - creation of a data bank and a social indicators system (SIS) for Bolivia based on the existing information; - application and development of methods to control the quality of the existing information and recommendations to INE and other agencies that gather social statistics for improvement of the primary statistics; - publication of a review, <i>Coyuntura Social [Current Social Trends]</i>; - improvement of electronic access to the SIS (through interconnected networks and data banks on diskette). 	<ul style="list-style-type: none"> - degree of availability of SIS data and indicators; - degree of timeliness of the availability of the indicators; - quality of methodological documents; - degree of application of recommendations for improving the quality of the primary data; - frequency and quality of <i>Coyuntura Social</i> (minimum of once per year); - degree of electronic dissemination of the SIS. 	<ul style="list-style-type: none"> - Project documents and progress reports 	<ul style="list-style-type: none"> - Continuity in proc and improvement of t primary data for inp into the SIS - Continuity of qual personnel in the exe institutions.

DIAGNOSIS	THE PROJECT	INDICATORS	MEANS OF VERIFICATION (Verification to be done every six months from the start of the project to its completion)	ASSUMPTIONS
	<p>(ii) Social accounting</p> <ul style="list-style-type: none"> - devising of a social accounting system (SAM); - studies demonstrating the discrepancies between the different sources of social and economic data and recommendations for improvements; - use of the SAM to generate a new base year for national accounts. <p>(iii) General equilibrium model</p> <ul style="list-style-type: none"> - construction of a general equilibrium model based on the SAM for evaluating the effectiveness and impact of economic and social policies on poverty; - studies on the effectiveness of the adjustment policies and social programs using the model. <p>(iv) Training</p> <ul style="list-style-type: none"> - Training courses in the use of social indicators and social accounting systems and for analyzing social policy; - grants for training abroad. 	<ul style="list-style-type: none"> - Production of the SAM and degree of disaggregation; - Quality of methodological documents; - Degree of application of the recommendations based on the SAM construction process for reviewing the national accounts; - Availability of the model; - Documents demonstrating the value of the model for policy analysis; - Production and quality of instructional materials; - Number (by institution) of participants trained (total: 120 in 3 years) - Number of grant recipients (total: 8 in 3 years). 	<ul style="list-style-type: none"> - Project documents and progress reports - Project documents and progress reports - Project documents and progress reports 	<ul style="list-style-type: none"> - Allocation of sufficient resources for improving the national accounts - Continuity of qualified personnel in the external institutions - Availability of precise statistics and updated output data - Continuity of qualified personnel in the external institutions - Sufficient demand for training activities

PROPOSED RESOLUTION

BOLIVIA. NON-REIMBURSABLE TECHNICAL COOPERATION FOR THE
STRENGTHENING OF THE SYSTEM OF SOCIAL POLICY INDICATORS
AND SOCIAL ANALYSIS (SISAPS)

The Board of Executive Directors

RESOLVES:

1. That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such agreements as may be necessary with the Republic of Bolivia and to adopt such other measures as may be pertinent for the execution of the plan of operations referred to in Document AT-_____ with respect to a technical cooperation for the Strengthening of the System of Social Policy Indicators and Social Analysis (SISAPS) in Bolivia.

2. That up to the sum of US\$1,000,000.00 (one million dollars), or its equivalent, is authorized for the purposes of this resolution, chargeable to the net income of the Fund for Special Operations.

3. That the above-mentioned sum is to be provided on a non-reimbursable basis.