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The OPTIONS for Population Policy Project

Country Strategy

Bolivia

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Executive Summary

In Bolivia, OPTIONS assistance will focus on the implementation of the Reproductive Health Project, a new nationwide GOB initiative supported by USAID and UNFPA. The project comprises four components: detection and treatment of sexually transmitted diseases, detection and treatment of cervical cancer, promotion of breast feeding, and--most importantly--family planning service provision. The Ministry of Health, under the auspices of a National Coordination Committee, is responsible for coordinating planning and implementation of this new initiative among the various subsectors: the Ministry of Health itself, the Bolivian Social Security Institute, and approximately ten private voluntary organizations. However, the tools and procedures needed to coordinate the planning and implementation of this multi-agency effort are lacking. Long- and short-term program objectives need to be quantified at national and subnational levels for the program as a whole, and for each implementing institution. Annual operating budgets need to be prepared and commodity and human resource requirements determined. Procedures for collecting and aggregating national service statistics need to be specified for purposes of program supervision and evaluation and to facilitate planning in the future.

In response to these needs, USAID, the Bolivian Ministry of Health, and the Social Security Institute have requested the policy implementation tools pioneered in Peru under the OPTIONS I Project. UNFPA and PAHO endorse this request.

Specifically, OPTIONS has been called upon to adapt the tools and procedures embodied in the QUIPUS model for use in Bolivia and to train local counterparts in their use. QUIPUS will be used to coordinate the planning and implementation process. OPTIONS will develop the institutional capability within the National Reproductive Health Program to (1) quantify national and subnational objectives for the family planning and other project components; (2) prepare annual implementation plans, including budgets and commodity requirement projections for the various implementing agencies; (3) determine long- and short-term training requirements; (4) monitor, supervise and evaluate annual program performance; and (5) efficiently manage the resources allocated to the program.

This assistance will be provided within the framework of the second OPTIONS project mandate: *to develop national plans for expanding family planning services by establishing quantified objectives, estimating resource requirements, and optimizing the mix of delivery strategies and contraceptive methods.*

The relation between the Bolivia strategy and the five OPTIONS project mandates is summarized below.

OPTIONS Mandates	Bolivia Strategy
1. Articulate comprehensive national population policies that endorse and encourage family planning.	Assistance in this area would not be appropriate at this time.
2. Develop national plans for expanding family planning services by establishing quantified objectives, estimating resource requirements, and optimizing the mix of service delivery strategies and contraceptive methods.	This mandate underlies the OPTIONS strategy for Bolivia. By introducing the macro level planning tools and procedures needed to produce national and subnational implementation plans for Bolivia's reproductive health initiative, OPTIONS assistance will help bridge the gap between the articulation of the new policy and its implementation, at a critical time. It will also help consolidate the progress that has been made to date. Cost studies will be undertaken to provide the basis for preparing budgets and for measuring cost-effectiveness.
3. Increase public sector resources allocated to family planning programs and improve the efficiency of resource use through the application of such techniques as benefit-cost and cost-effectiveness analyses. OPTIONS II will develop detailed estimates of the cost of family planning services.	Given Bolivia's aversion to providing family planning services for economic or demographic reasons, cost-benefit studies would be inappropriate and potentially counter-productive.
4. Reform laws and regulation that inhibit access to family planning.	The anti-family planning bias of Bolivia's previous governments, while highly effective, resulted in few official regulations or legal restrictions that now inhibit access to family planning. The few that do exist are not enforced.
5. Increase private sector resources for family planning programs by using analytic tools such as demand analyses, cost analyses, and benefit-cost analyses in working with Social Security Institutes, health insurance companies, health maintenance organizations, cooperatives, community organizations and non-governmental organizations to demonstrate the benefits that can be accrued by the provision of family planning services.	OPTIONS will work directly with the Social Security Institute and will encourage the National Coordinating Committee to include commercial entities and for-profit health care providers in the Reproductive Health Project as well.

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Appendix: Description of the QUIPUS Model

Bolivia

Table 1

Key Indicators

Population size:	7 million
Population density:	6 per square kilometer
Crude birth rate:	42.8/1000
Crude death rate:	14.1/1000
Rate of natural increase:	2.9 percent
Infant mortality rate:	102/1000 live births
Child mortality rate:	124/1000
Maternal mortality rate:	48/10,000
Total fertility rate:	5.0
Contraceptive Prevalence:	30% of Women in Union, age 15-49
Modern methods:	12%
Traditional methods:	18%

I. Demographic Profile

Bolivia has the highest total fertility rate, the highest maternal, infant and child mortality rates, and the lowest contraceptive prevalence rate in South America. According to the 1989 Demographic and Health Survey, only 12.2 percent of reproductive age women in union were using a modern family planning method at the time of the survey. Bolivia's low contraceptive prevalence rate would suggest a TFR higher than five. The difference may be attributable to Bolivia's abortion rate, estimated at between one and two abortions per woman during her reproductive life. Furthermore, a study in Cochabamba in 1987 revealed that 45 percent of maternal deaths occurring during pregnancy resulted from complications associated with illegally induced abortion.

With a population density of six inhabitants per square kilometer, Bolivia is sparsely populated compared to the average for Latin America and the Caribbean of 20 inhabitants per square kilometer. The distribution of the population between urban and rural areas also varies from the norm, 47.8 percent urban and 52.2 percent rural in Bolivia compared to 68.9 percent urban and 31.1 rural for the rest of Latin America and the Caribbean.

Bolivia has a varied ethnic composition, as reflected in the languages spoken in the home. Although the majority of women of reproductive age speak Spanish as a first language, 19 percent speak Aymara and 11 percent Quechua.

Analysts believe that there has been a high rate of out migration over the years, although no reliable data are available. Several administrations have adopted policies to encourage immigration, but they have been ineffective.

For many years Bolivia has had a pronatalist, anti-family planning population policy. The rationale for this policy was that given Bolivia's low population density, increased population growth was essential to ensure national sovereignty, particularly in Bolivia's vast, sparsely populated border areas. Although this remained an implicit policy, it was highly effective: Attempts to introduce or expand family planning services during the past twenty years were effectively thwarted. (See Section IV, Policy Issues and Constraints, for a fuller discussion of Bolivia's population policy.)

This situation is changing. Bolivian leaders now recognize the adverse effects of Bolivia's high total fertility rate on maternal, infant and child morbidity and mortality. This awareness has emboldened the GOB to adopt a new, unofficial policy that respects the rights of women to freely determine the number and spacing of their children. It is important to emphasize, however, that it is only within the context of reproductive health, i.e., to reduce maternal, infant and child mortality and the rate of illegal abortion, that family planning activities will be permitted. OPTIONS assistance will be provided in that context.

II. Contraceptive Prevalence and Unmet Need

The 1989 DHS revealed that only 30.3 percent of reproductive age women in union were current users of contraceptive methods. Of those, 18.1 percent used a traditional method, and 12.2 percent a modern method. Table 2 shows the method breakdown.

Another 15.5 percent had abandoned use of one or more family planning methods at one time or another during the previous five years. Of this group, 33.8 percent cited method failure as the primary reason they discontinued use; and 16.1 percent cited adverse secondary effects; 16.2 abandoned use to become pregnant. The discontinuation rate, however, is more likely attributable to the method mix itself, given the disproportionately high percentage of use of ineffective traditional methods, the reproductive intent of the women interviewed, and the age structure of the population.

Table 2

Percentage of Reproductive Age Women Married or in Union
Using a Family Planning Method
by Type of Method - 1989

Pill:	1.8
IUD:	4.7
Injectable:	0.8
Diaphragm:	0.2
Condom:	0.3
VSC Female:	4.4
Periodic Abstinence:	16.1
Withdrawal:	1.1
Other Traditional:	0.9
Total:	30.3

Source: ENDSA, 1989

Unmet Need

The DHS also revealed a high level of unmet need for family planning services. Of the reproductive age women in union who were not using a family planning method at the time of the survey, 48.5 percent stated that they wished to have no more children; an additional 9.9 percent stated that they wished to wait two years or more before having a child.

Yet only 29.8 percent of the non-users stated that they intended to use a family planning method in the future; 57.3 percent stated that they had no intention of ever using a family planning method; the remaining 12.9 percent were unsure. This points to the need for improving and expanding information and education regarding family planning methods as well.

A striking feature of Bolivia's unmet need for family planning services is the age distribution. Among 15-19 year old women in union, 40.8 percent wanted no more children; another 35.6 percent wanted to wait two years or more before having a child. Yet only 16.1 percent were using a family planning method at the time of the survey (13.6 using traditional methods, only 2.5 percent using modern methods).

Sources of Family Planning Services and Supplies

It is not surprising that the private, for-profit sector has been the major source of most modern family planning services and supplies, with the exception of voluntary surgical contraception: 62.8% of voluntary surgical contraception procedures were performed in public sector facilities-- public hospitals, health centers, health posts, medical posts, or in Social Security facilities. As the following table shows, the for-profit sector (private physicians/clinics, private hospitals and

pharmacies) were the principal supply source for the users of other modern methods: pills, condoms, diaphragms, injectables and IUDs. It is for this reason that, in the short term, the biggest payoff, in terms of increasing access to family planning services, will come from introducing and expanding services in the public sector.

Sources of Family Planning Services and Supplies

	Public Sector	For-Profit Sector	Other (Unknown)	Total
Pill	7.5%	84.1%	8.4%	100.0%
Condom	7.0%	86.3%	6.8%	100.1%
Diaphragm	13.9%	65.6%	20.5%	100.0%
Injectable	33.2%	56.8%	10.1%	100.1%
IUD	19.7%	77.1%	3.1%	99.9%
VSC	62.8%	36.5%	0.5%	99.8%

III. Key Organizations and Activities

International donor support to the Reproductive Health Project is coordinated through the National Coordinating Committee. In addition to USAID, the United Nations Population Fund (UNFPA), through PAHO, is a major supporter of the MOH portion of the Reproductive Health Project. The World Bank will assist the MOH to improve its physical infrastructure and to strengthen human resources. UNICEF supports primary health care efforts, although it does not provide direct support for family planning activities. Pathfinder is the major A.I.D.-supported intermediary that provides direct support for service delivery in Bolivia.

Community and Child Health Project

The USAID-funded CCHP is a child survival effort that complements the Reproductive Health Project. Underway for two years, the project provides technical assistance and support to the MOH in selected geographic regions of the country for massive immunization campaigns, diarrheal control, nutrition, and control of Chagas Disease. Another complementary project is being prepared that will support similar activities among private sector institutions. These projects, together with the new Reproductive Health Project, are designed to reduce maternal, infant and child morbidity and mortality in Bolivia.

Data Collection and Analysis

Two public sector institutions dominate the collection and analysis of social and demographic data: the National Statistics Institute (INE) and the National Population Commission (CONAPO). The last national census was undertaken in 1976. A Survey of Population and Housing (ENPV) was undertaken in 1988; a Demographic and Health Survey (ENDSA) was undertaken in 1989.

Public Sector Family Planning Service Providers

The Ministry of Health, the Bolivian Social Security Institute (CNS) and the Armed Forces are the major public health care providers in Bolivia. The MOH, the largest provider, probably covers only about 40 percent of the population however, and in rural areas probably only about 20 percent. Officially, public sector institutions provide no family planning services. Nonetheless, within several public facilities, mainly hospitals, concerned physicians do offer family planning services to their clients, primarily voluntary surgical contraception for women for whom pregnancy is considered "high risk".

Private Sector Family Planning Service Providers

The major private voluntary family planning organizations in Bolivia are:

- Centro de Investigaciones y Estudios Sociales (CIES)
- Fundación San Gabriel
- PROSALUD (Santa Cruz)
- Fundación Médico-Social (FAMES)
- Centro de Orientación Familiar (COF)
- FEPADE (Cochabamba)
- MEDICO (Cochabamba)
- Centro Radial de Orientación Familiar (CROF)

FAMES provides commodities and IE&C materials to private physicians, many of whom work in public hospitals as well as in their private practice. In addition, and as pointed out earlier, pharmacies supply 31.2 percent of all pill users and 51.4 percent of all condom users.

Other Important Groups

The National Coordinating Committee was established in October, 1989 to oversee the implementation of the reproductive health program. The NCC meets monthly and comprises members of the international donor community, representatives from the Ministry of Health, the Social Security Institute, and major Bolivian PVOs. Commercial entities and private, for-profit providers are not yet represented. Three working groups, or subcommittees, have been formed within the NCC that meet regularly to oversee implementation of the program's

components: IE&C; training and service delivery; and population policy, research and evaluation.

IV. Policy Issues and Constraints

Through the decade of the 1980's, the inclusion of population factors in development planning has been established through work of the Research Triangle Institute first through the INPLAN and then the RAPID III projects. This work included: institution building, primarily CONAPO and CORDECRUZ and secondarily INE and the MOH; model implementation; development of STORYBOARD presentations; in-depth analysis, and high level seminars.

Initially the RAPID III work concentrated on factors related to infant survival. Then it broadened to reproductive risk and population distribution issues. Through multiple activities RAPID III plans to continue consensus building within increasingly large segments of the Bolivian population on the merits of family planning for health and human rights.

Nonetheless, Bolivia has no official population policy. Until recently it had an implicit, pronatalist, anti-family planning policy designed to increase population growth. During the last twenty years, the policy was highly effective in thwarting access to family planning services.

The rationale for this policy was the widespread belief that due to Bolivia's low population density, population growth was needed to ensure Bolivia's sovereignty, particularly in sparsely populated areas bordering neighboring countries. Bolivians also became suspicious of foreign donor activities, particularly health-related activities. There are many poignant examples of the effectiveness of this unofficial policy.

In 1971, the Peace Corps was expelled from Bolivia amidst unfounded charges that Peace Corps Volunteers were sterilizing Bolivian women. Rumors also spread that donated food from the United States contained sterilizing agents. Twenty years later, many Bolivians still believe these allegations.

In 1976, PROFAM, the IPPF affiliate, was closed down.

In 1982 the Ministry of Health adopted a resolution forbidding PVOs to work in family planning.

In the late 1980s World Bank and UNFPA reports were attacked in the press for supporting population activities.

The situation is changing. A pivotal event was a conference held jointly by the MOH and the Catholic Church in March, 1989 entitled "The Fight Against Abortion." A summary of the proceedings called for government-sponsored sex education and for the dissemination of information and services to enable couples to voluntarily practice family planning for the purpose of combatting Bolivia's high rate of abortion and to improve the health of mothers and

their children. In November, 1989 the MOH issued a decree directing Government clinics to introduce family planning services by 1992. Family planning can only be provided in the context of reproductive health and personal choice regarding the number and spacing of children, and never to meet demographic or economic objectives. Nonetheless, this decree marks an important milestone in the history of reproductive rights in Bolivia.

In light of the OPTIONS mandate *to articulate comprehensive national policies that endorse and encourage family planning*, is it time to promulgate such a policy? Probably not at this time, at least not an explicit policy. That argument is best summarized in USAID's project paper for the Reproductive Health Project in which it is stated: "...it is universally agreed within Bolivia that [an explicit population] policy is neither appropriate nor feasible in the near future given the political and ideological attitudes and the confusion that exists between the concepts of family planning and birth control. Indeed, it is essential that all policy development activities funded under the Project address family planning in the context of reproductive health, and not be oriented toward suggesting the need for a policy designed to reduce fertility for macroeconomic purposes."

CONAPO has sponsored a series of successful public debates, many of them televised, that have served to broaden and strengthen the emerging consensus among Bolivians that family planning is acceptable--within the context of reproductive health. While a broad population policy that articulates awareness of demographic variables and their importance to Bolivia's development may be desirable, one that endorses family planning in that context will probably never be addressed in a formal policy, due to the strong resistance among Bolivians to placing family planning in a demographic or macroeconomic context. Therefore, to move the policy agenda along, the most effective use of OPTIONS resources at this moment in Bolivia is to support the Government's efforts to plan and implement a national family planning program housed within the Reproductive Health Project. After all, the government now has a family planning policy, expressed at the sectoral level by means of a MOH decree.

The most urgent need is for thoughtful strategic planning that will facilitate implementation of the Reproductive Health Project. To that end, USAID, the MOH and the Social Security Institute are seeking OPTIONS assistance. Although resources have been committed, the project lacks quantified, short- and long-term objectives. Annual operating budgets need to be prepared for each of the institutions at national and subnational levels. The commodity and human resource requirements for the program and for each participating institution must be determined. The commodity projections need to reflect an appropriate method mix for Bolivia in light of the age structure of the population and the reproductive preferences of individual users revealed by the DHS. The procedures for collecting and analyzing nationwide service statistics, for program evaluation, supervision, and subsequent annual planning purposes, need to be specified. Mechanisms for tracking commodity procurement and distribution must be put in place.

To overcome these obstacles, USAID, the MOH, the Social Security Institute and the National Coordinating Committee, after considering a number of alternative approaches, have selected QUIPUS for application in Bolivia. UNFPA and PAHO also endorse this selection. USAID has therefore requested OPTIONS to adapt the QUIPUS model for Bolivia and to train Bolivians in its use.

Since implementation must be closely coordinated among the various subsectors, OPTIONS will also help establish the procedures needed to coordinate the implementation planning process. Implementing institutions will be encouraged to meet four times a year. Reports generated by the various QUIPUS modules will be presented and reviewed at these meetings. Participants will review the program's progress to date and, using QUIPUS, test alternative implementation strategies for subsequent periods by modifying the assumptions upon which the projections are made. In this way, consensus can be built regarding the overall objectives of the program and the importance of each implementing institution's role in meeting them.

With respect to the OPTIONS mandate *to increase public sector resources allocated to family planning programs and improve the efficiency of resource use...*, it should be pointed out that Bolivia is carrying out a structural adjustment program that has resulted in severe cutbacks in public expenditures, including expenditures for health. Nonetheless, one of the features of the QUIPUS model that Ministry of Health officials find particularly attractive is its ability to produce national and, of special interest, subnational budgets in the form required for presentation to the Ministry of Finance. The inability to produce such budgets has delayed decentralization efforts. Furthermore, since QUIPUS links budgets to quantified objectives, measuring and tracking cost-effectiveness will be simplified. Finally, the commodity procurement and distribution tracking module of QUIPUS will improve the efficient use of those resources.

With respect to the OPTIONS mandate *to reform laws that inhibit access to family planning* it is interesting to note that Bolivia's previous anti-family planning policy, while highly effective, resulted in few official regulations or legal restrictions that now inhibit access to family planning. The few that do exist are not enforced.

With respect to the last OPTIONS mandate, *to increase private sector resources for family planning programs...*, OPTIONS will encourage an expansion of private sector representation on the National Coordinating Committee. Bolivia's structural adjustment program, coupled with the reversal of its anti-family planning policy, combine to offer new opportunities for the private sector. The National Coordinating Committee should be the forum for stimulating greater private sector involvement in this area.

v. Objectives of OPTIONS II Assistance

In keeping with GOB policy, OPTIONS assistance in Bolivia will be provided in the context of reproductive health: increasing access to and use of voluntary family planning services and methods for the purpose of reducing maternal and infant mortality. To turn this new policy into practice, the OPTIONS strategy calls for introducing the tools and procedures needed to initiate and sustain the policy implementation process.

OPTIONS will also initiate the coordinating process needed to plan, implement and evaluate the Reproductive Health Project among the various public and private implementing institutions: the Ministry of Health, the Bolivian Social Security Institute (CNS), and approximately ten PVOs.

The matrix on page 10 displays the outcomes and purpose of OPTIONS assistance in Bolivia and how they are related to the goal of the Reproductive Health Project. The indicators for the goal, developed by the MOH, while laudable, are probably overly ambitious. Baseline data for the purpose indicators will be collected and analyzed in July and October, 1991. The inputs are presented on page 13.

Three components of the QUIPUS model will be adapted for Bolivia and installed in the agencies listed below.

QUIPUS Components

Implementing Agencies	Programming and Budgeting	Monitoring and Evaluation	Logistics Management
Ministerio de Salud	X	X	X
Caja Nacional de Salud	X	X	X
FAMES		X	X
Fundación S. Gabriel		X	X
MEDICO		X	X
CIES		X	X
PROSALUD		X	X
FEPADÉ		X	
CROF		X	
SERVIFAM		X	

Programming and Budgeting

The Programming and Budgeting component will be used to set national objectives for each of the four project components: family planning information and services, detection and treatment of cervical cancer, detection and treatment of sexually transmitted diseases, and promotion of breastfeeding.

Local and international expert consultants will review the adaptations of the QUIPUS model with respect to cervical cancer and sexually transmitted diseases. The Georgetown International Institute for Studies in Natural Family Planning will review the adaptations with respect to breastfeeding.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p>Goal</p> <p><u>Maternal and infant mortality rates reduced.</u></p>	<p>By 1993:</p> <p>Maternal mortality rate (48/10,000 live births) reduced by 50 percent.</p> <p>Perinatal mortality rate (110/1000 live births) reduced by 30 percent.</p> <p>Infant mortality rate (159/1000 live births) reduced by 50 percent.</p> <p>Mortality rate among children aged 1-5 (23/1000) reduced by 30 percent.</p>	<p>Instituto Nacional de Estadística.</p>	<p>Other child survival programs successful.</p>
<p>Purpose</p> <p><u>Reproductive Health Project fully implemented.</u></p>	<p>EOPS By the end of January, 1993:</p> <p>Number of public and private health care facilities providing reproductive health care services increased.</p> <p>1. Family Planning. Increased contraceptive prevalence.</p> <p>2. Sexually Transmitted Diseases. Number of cases of sexually transmitted diseases detected/treated increased.</p> <p>3. Cervical Cancer. Number of cases of cervical cancer cases detected/treated increased.</p> <p>4. Breastfeeding. Length of time mothers breastfeed their newborn children extended.</p>	<p>Review of AID, UNFPA, MOH and RPH project documents.</p> <p>1. Next DHS, and progress reports generated by RPH project.</p> <p>2. Progress reports generated by RPH project.</p> <p>3. Progress reports generated by RPH project.</p> <p>4. Analysis of survey data.</p>	<p>Policy environment remains favorable to introducing family planning services as part of Reproductive Health Program.</p> <p>Reproductive health program undertaken for health rather than for demographic or economic reasons</p> <p>UNFPA-funded PROMIMA project.</p>
<p>Outputs</p> <p><u>Coordinated National Implementation Plans Developed for the Reproductive Health Project.</u></p> <p>1. National and subnational objectives quantified.</p> <p>2. Annual budgets prepared for public sector institutions.</p> <p>3. Commodity, equipment and supply requirements specified.</p> <p>4. Human resource requirements determined.</p> <p>5. Mechanism for coordinating annual planning, implementation and evaluation among participating institutions functioning.</p> <p>6. Procedures for collecting, aggregating and analyzing service statistics functioning.</p> <p>7. System for tracking commodity procurement and distribution functioning.</p> <p>8. Bolivian counterparts trained to operate all systems</p>	<p>Two complete sets of national and subnational implementation plans will have been developed for two annual planning, implementation and evaluation cycles: in October 1991 for CY 1992, and in October 1992 for CY 1993.</p> <p>1.1 Prevalence and user objectives quantified for all participating institutions at national and subnational levels.</p> <p>1.2 Appropriate method mix specified for each region, for each implementing institution.</p> <p>2. Operating budgets at regional levels prepared for MOH and Social Security Institute.</p> <p>3. Quantity and type of equipment, commodities and supplies specified for each participating institution, in each region of the country.</p> <p>4. Matrices that display the human resource requirements available/needed to meet program objectives.</p> <p>5. Coordination Council meets four times each year to review program progress to date and prepare implementation plans for following year.</p> <p>6. Progress reports comparing actual versus planned project performance prepared and circulated monthly.</p> <p>7. Reports displaying stock-on-hand and in the pipeline for each storage facility and distribution point.</p> <p>8. Counterparts trained in 11 participating institutions.</p>	<p>AID files. Review of documents at implementing agencies.</p> <p>AID and RPH project files.</p>	<p>Close coordination between OPTIONS activities and the activities undertaken by centrally-funded projects in Bolivia.</p>

Under the auspices of the Ministry of Health, personnel trained by OPTIONS will quantify national objectives for each of the four project components. Annual objectives will be disaggregated by subsector (or institution), and within each subsector by geographic area and method.

Cost studies will be undertaken to provide the basis for preparing annual budgets for the public sector institutions participating in the project, in the format required by the Ministry of Finance. The cost studies will also permit cost-effectiveness ratios to be derived for those institutions. Commodity and the human resource training requirements will also be specified for all implementing institutions.

Coordination meetings will be held four times each year, in January, April, July and October. Each October, the results of the planning exercise for the following year will be presented, discussed, and modified using QUIPUS. In this way, each institution actively participates in the planning process, and consensus and commitment are reached regarding the level of effort and resources required to meet the program's annual objectives. Each January, after the annual budgets have been approved by the Ministry of Finance, the implementation plan will again be reviewed. At each of the meetings, the performance of the program during the previous quarter will also be presented and reviewed.

Performance Monitoring and Evaluation

The Performance Monitoring and Evaluation module will be used to compile national and subnational service statistics, compare actual versus planned performance during implementation, and provide input for the preparation of subsequent annual implementation plans. In June, 1991 OPTIONS staff will present a set of sample reports that can be used to monitor trends and evaluate the progress of the program toward meeting annual and long-term objectives. To produce the information contained in the reports, the external reporting requirements of the implementing agencies vis a vis the national program will also be explained. Any modifications agreed upon by the participants will be incorporated into the Performance Monitoring and Evaluation module before it is installed in each participating institution.

Logistics Management

The Logistics Management module will be used to "improve the efficiency of resource use." It will permit the four agencies responsible for commodity procurement and distribution, the Ministry of Health, the Social Security Institute, FAMES, and the Fundación San Gabriel, to track stock on hand, on-order and in the pipeline, by institution and storage facility.

VI. OPTIONS Country Strategy Implementation Schedule

The milestone events in the Bolivia country strategy are summarized in the following chart. In essence, technical assistance will be provided during two, complete annual planning cycles, for 1992 and 1993. In 1992 the program will be implemented in selected areas of Bolivia.

In 1993, the program will be expanded throughout the entire country. The dates in the chart correspond to the dates proposed for the policy implementation coordination meetings.

Implementation Schedule (in Bolivia)	
March, 1991	Assessment of the population policy environment in Bolivia. Preparation of OPTIONS country strategy.
July, 1991	Installation of the performance monitoring and evaluation module and the logistics and inventory management module in selected institutions. Training data entry operators and preparing report formats. Gathering and analyzing baseline data for planning and budgeting module.
October, 1991	Installation of planning and budgeting module in selected institutions. Preparation of coordinated implementation plans and budgets for selected regions for CY 1992.
January, 1992	Review of approved implementation plans and budgets for selected regions for CY 1992. Review of program progress to date.
April, 1992	Service delivery unit cost analysis for refining budget estimates. Review of program progress to date.
July, 1992	Alternative strategies for expanding program to entire country in 1992. Review of program progress to date.
October, 1992	Preparation of coordinated implementation plans and budgets for the entire country for CY 1993. Review of program progress to date.
January, 1993	Review of approved implementation plans and budgets for all Bolivia for CY 1993. Review of program progress to date.

VII. Target Groups and Counterparts

The Ministry of Health will be OPTION's counterpart institution in Bolivia. Target groups for OPTIONS assistance include the Ministry itself, the Social Security Institute, and the PVOs listed earlier. OPTIONS will also work closely with the National Coordinating Committee and will encourage its leadership to broaden the committee's membership to include representatives from Bolivia's private, for-profit health care providers and commercial entities such as pharmaceutical houses.

The proposed OPTIONS activities have been closely coordinated with the activities of the other A.I.D. centrally-funded projects active in Bolivia: Pathfinder, RAPID III, INOPAL, FPMD, JHPIEGO, Mother Care, etc. Whereas OPTIONS will provide assistance at the macro level, focussing on the mechanisms needed to coordinate national and subnational planning and resource allocation among all the various subsectors, the other projects will focus on strengthening individual institutions, primarily the PVOs.

VIII. Resource Requirements

OPTIONS assistance will be provided over a twenty month period beginning in June, 1991 and ending in January 1993. This will permit OPTIONS to work side by side with Bolivian counterparts in the preparation of two complete implementation plans, for CY 1992 and CY 1993. It will also permit OPTIONS to fully customize the three QUIPUS modules for Bolivia and to train counterparts in its use.

Inputs

	FY '91	FY '92	FY '93	Total
Person weeks in Bolivia	37	51	12	100
Person weeks in U.S.	11	15	6	32
Person weeks in Peru	34	48	10	92
Total weeks	82	114	28	224
Round trips US/La Paz/US	3	4	1	8
Round trips Lima/La Paz/Lima	11	12	3	26

* Includes 46 weeks of computer programming time in Peru.

In addition to the requirements listed above, one observational travel trip to Peru for leaders and key technical staff will be scheduled to view QUIPUS where it was developed and has been used successfully for three consecutive years. Desktop computers and software will also be required.

Logistics and Inventory

The logistics and inventory module is designed to meet the needs of large LDC health programs. It manages the procurement and distribution of pharmaceuticals, supplies, and equipment for an unlimited number of storage and distribution points, thus ensuring the efficient use of resources.

QUIPUS helps to rationalize the allocation of resources by quantifying outputs and linking them directly to the resources required to produce them. Cost-effectiveness, and other resource-effectiveness ratios important for planning, monitoring, and evaluation are easily derived.

The QUIPUS Model is especially helpful when policy implementation must be coordinated among different institutions (public and private) in different geographic areas within a country or region. The model permits information to be displayed at different levels of aggregation and disaggregation. Objectives and resource requirements, for example, may be displayed for an entire country, or by state or region; they may be displayed for all implementing institutions, or for a single institution, etc. This is essential for producing coordinated implementation plans, allocating resources in a rational manner, implementing policy initiatives efficiently, and monitoring progress.

The QUIPUS Model was developed in Peru by The Development Group, Inc., under S&T/POP's centrally funded OPTIONS project. It is used in Peru to manage the family planning component of the national population policy.

QUIPUS has had far-reaching effects, not only for the Peruvian Ministry of Health and the Peruvian Social Security Institute (IPSS), but for the entire family planning effort. For example, using QUIPUS, national family planning program officials have consolidated the planning and budgeting process for the first time by producing budgets that link costs to quantified objectives.

The QUIPUS Model

The Implementation of Policy Reforms in Developing Countries

The absence of appropriate management information is a major obstacle to implementing new policies in many developing countries. Inversely, the ready availability of management information for planning and budgeting encourages timely implementation of policy initiatives. Furthermore, implementing policy through established host government procedures helps ensure that implementation will endure in the face of political and economic change. These are the premises on which the QUIPUS model was developed.

QUIPUS is a computer program designed to bridge the gap between policy formulation and implementation. It takes its name from the record keeping system used by the ancient Incas in Peru. It is used to plan, monitor, supervise, and evaluate activities that put policy into practice. Entering policy goals into the model produces quantifiable objectives, resource requirements (including local currency and U.S. dollar budgets), and the indicators needed to measure and evaluate progress.

QUIPUS consists of three modules that function independently or together as a single, integrated program:

Planning and Budgeting

The planning and budgeting module translates broad national policy goals into measurable objectives, budgets, and commodity requirements. Each of these elements is then allocated among the various subsectors or implementing institution, nationally and subnationally, according to the various types of health interventions being programmed.

Performance Monitoring and Evaluation

The performance monitoring and evaluation module aggregates the service statistics produced by the various implementing institutions to produce a comprehensive view of program progress over time. It tracks relevant performance indicators and permits detailed comparison of actual versus planned performance within and among institutions, nationally and subnationally.