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**AN EVALUATION OF THE NATIONAL RURAL HOUSEHOLD  
SURVEY PROJECT**

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## LIST OF ACRONYMS AND ABBREVIATIONS

AD	Alternative Development
AID	Agency for International Development
ARD	Office of Agriculture and Rural Development
ASAR	Asociación de Servicios Artesanales y Rurales
BUCEN	U.S. Bureau of the Census
CORDEP	Cochabamba Regional Development Program
CRHS	Cochabamba Rural Household Survey
FENACOAB	Federación Nacional de Cooperativas Agropecuarias de Bolivia
GO	Governmental Organization
GOB	Government of Bolivia
IBTA	Instituto Boliviano de Tecnología Agropecuaria
IHS	Integrated Household Survey
INE	Instituto Nacional de Estadísticas
INEDER	Instituto de Educación para el Desarrollo Rural
MACA	Ministry of Agriculture
NGO	Non-governmental Organization
NRHS	National Rural Household Survey
PDAR	Proyecto de Desarrollo Alternativo Regional
PP	Project Paper
SAR	Semi-Annual Report
SO	Strategic Objective
SOW	Scope of Work
SVEN	Sistema de Vigilancia Epidemiológico Nutricional
TA	Technical Assistance
UDAPE	Unidad de Análisis de Políticas Económicas
UDAPSO	Unidad de Análisis de Políticas
USAID	U.S. Agency for International Development

## EXECUTIVE SUMMARY

This report is an evaluation of the National Rural Household Survey Project, implemented in 1991 and 1992. The survey was scaled down from national level to the Department of Cochabamba in July 1991. The goal of the project is to improve rural sector policy planning, project design and evaluation.

In the evaluation report, data needs of four user groups (AID, AD, GOs and NGOs) are reviewed, and the usefulness of the Cochabamba Rural Household Survey's results to date is indicated.

Design characteristics of the survey were evaluated and analyzed. Some opinions on institutional capabilities for the implementation of the survey are also reflected in this report.

As a result of the evaluation, ten recommendations to improve future surveys were listed in the final section.

## I. INTRODUCTION

### A. NRHS Project History and Objectives

Fieldwork for the National Rural Household Survey (NRHS) was carried out last year in August 1991, but limited to the Department of Cochabamba. The rationale behind a nationwide survey was as follows, according to the original Project Paper (PP, July 1990):

(PP., p2-3, summarized): ... To formulate sound and coherent agricultural and rural sector policies and programs, the GOB needs a reliable source of baseline information. Unfortunately, there is no up-to-date rural sector data base ... To respond to this need ... the Mission will finance a multi-purpose NRHS... The NRHS will furnish nationally representative information on the socio-economic characteristics of rural farm and non-farm households, as well as on factors affecting rural production and employment...

... There are two key reasons for conducting a rural survey at this time. First, better information on rural households will help improve and guide rural sector policy planning and project design among the GCB, USAID, and other donors. Second, the baseline data derived from the survey will help USAID/Bolivia evaluate the impact of its program...

An Agricultural Assessment by CHEMONICS in 1988 recommended that a Rural Household Survey be conducted, reasoning that the last survey dated from 1978. The rationale for a survey was then to see what type of investment would have most impact and to see where jobs could be generated.

Planning for the NRHS was started in August 1989 by USAID/Bolivia and BUCEN advisors. After study and evaluation it was decided that INE should do the survey and MACA would be advisor to the survey. BUCEN prepared a preliminary design and recommended that interviews take place in July at the end of the agricultural year.

In March/April 1990 the possibility of integrating the different surveys being planned or executed by INE was discussed by INE, BUCEN advisors, the World Bank, and USAID/Bolivia. At that time, the World Bank financed four rounds of surveys which together comprised the Integrated Household Survey. It was decided that the fourth round of the IHS would be limited to urban areas and the NRHS to rural areas. It was also determined that the two surveys would be integrated by utilizing the same Master Sample and "Agricultural" Module.

In June 1990, work started on sample design, delineation of the survey's objectives, definition of the survey's variables and design of the questionnaire. Technical personnel however, had to deal with both surveys (NRHS and IHS), resulting in neither of the two being on schedule.

In July 1991, a BUCEN evaluation revealed that, due to several constraints, the survey could not be undertaken that year at the national level, and the Mission considered not doing the survey for 1991. In a meeting attended by the Minister of

Planning, INE's Director, USAID/Bolivia and BUCEN, it was decided that the best solution was to do the survey in Cochabamba in 1991 and decide on other surveys at a later date.

At the end of July an office opened in Cochabamba to continue the work, with personnel and Director contracted only for the NRHS. The interviews were done during August, 1991 and by the end of November, the raw data were ready for tabulation.

The NRHS was managed under ARD-office with Jonathan A. Sleeper as Project Manager up to November 1991, when it was transferred to Charley Hash and then later transferred to Kenneth Beasley, Economics-Office.

The Project Goal, Purpose, Survey Outputs and Analytical Objectives were described as follows in the original PP:

#### Goal

The goal of the Project is to improve rural sector policy planning, project design, and evaluation. The Project will contribute to the measurement of most, if not all, of the six program objectives of USAID/Bolivia.<sup>1</sup>

#### Purpose

The purpose of the Project is to develop baseline data on socio-economic characteristics of the rural population.

#### Survey Outputs

The survey outputs fall into five principal categories:

1. Methodological Documentation
2. Statistical Tables
3. Data tapes or Diskettes
4. A Data Users' Seminar
5. Data Analysis Publications

#### Analytical Objectives

The analytical objectives explain how the data from the survey will be used. Five main objectives were listed (PP, p. 7 and Resumen Metodologico ..., p. 1):

1. Compare the socio-economic status of rural households today with their socio-economic status in the past
2. Provide a baseline on the socio-economic status of rural households today against which comparisons can be made with the socio-economic status of rural households in the future
3. furnish descriptive information on rural households (by gender, where feasible) to assist in the targeting of future policies, programs, and projects
4. Link information on rural households with other data bases on the rural sector and with data

<sup>1</sup>These Objectives do not coincide anymore with those mentioned in the latest Action Plan.

bases on other sectors

5. Assess the relative potential of different policy instruments for having an impact on the welfare of rural households

## B. Evaluation objectives

In September 1992, Economics Office requested an evaluation of the survey. According to the Scope of Work (Annex A) "There has been considerable discussion in the Mission about the usefulness of this kind of Project, the need for further surveys of this type, where such surveys should be done, the information coverage of surveys, and how frequently these surveys should be implemented". The following objectives were set up for such an evaluation:

1. to assess the success of the NRHS project in collecting baseline information on rural households in terms of its usefulness to AID and other users in planning, implementing and monitoring development programs and projects; and
2. review the data needs of AID and other users and make recommendations on the design and basic characteristics of possible future AID surveys.

These objectives are translated into the following deliverables to be discussed in this report:

1. Review the Mission's five strategic objectives and the results of the NRHS actually completed for the department of Cochabamba and discuss the usefulness of the survey's results as a basis for planning and monitoring the Mission's programs and projects,
2. Review the data needs of other users, particularly UDAPE, UDAPSO, and other GOB policy and planning units. Indicate the usefulness of survey results available to date for these needs.
3. Make recommendations on the design and basic characteristics of possible future AID surveys, consistent with expected data needs for planning and project design, and project implementation and monitoring by AID and other users. Specifically address:
  - a) definition of the generic universe to be analyzed (i.e., households, individuals, crop areas, etc.)
  - b) location (i.e., rural areas nationwide, specific areas only such as the Department of Cochabamba, the Chapare, the Beni, etc.)

- c) if the survey were to be nationwide, discuss the pros and cons of relative oversampling of any specific geographic area to improve survey reliability for specific AID monitoring objectives
- d) discuss the kinds of baseline information that is not known to be available from other sources that could be collected on a systematic basis from this kind of survey.

Chapter II will address the deliverables mentioned under 1 and 2, and Chapter III will address the deliverables under 3, evaluating the survey as it was implemented. Chapter IV draws conclusions from the two previous Chapters and contains recommendations for possible future AID financed surveys.

The report will also include some discussion on whether the project objectives have been met, the design of the questionnaire, data reliability and institutional assessment.

The methodology is described in Annex B, and the persons and institutions contacted are listed in Annex C.

## II. DATA NEEDS

### A. Data needs of AID and other users

This report principally distinguishes data needs of four user groups, namely: AID La Paz (Table 1), AID and Organizations that need data for Alternative Development (Table 2), Government Organizations (Table 3) and Non-Government Organizations (NGO's) (Table 4). Although some duplications of data may be listed, this organization creates the possibility to identify common data needs. Sources (each of the four user groups) are mentioned in the respective data tables. In general, it appeared difficult for the respondents<sup>2</sup> to recall their required data needs.

Columns 1 and 2 of all tables state the data needs according to specific data categories. Column 3 relates the uses of these data to specific needs indicated by users or potential users. Column 4 lists other sources which might provide this data. Other sources of data used by AID can be found in the Performance tables of the Action Plan.

Table 1. Data needs AID.

Data related to:	Data needs	Uses	Sources
A. Crop specific information	<ul style="list-style-type: none"> <li>- Kind of crops grown</li> <li>- Size of cultivation area per crop</li> <li>- Start-up costs &amp; 1<sup>st</sup> year costs</li> <li>- Farmers that produce/do not produce coca</li> <li>- Income derived from specific crops</li> <li>- Crop specific harvests in kg/ha</li> <li>- Crop prices per unit</li> <li>- Destination of crops (includes autoconsumption)</li> </ul>	<ul style="list-style-type: none"> <li>- Indicators for developing markets</li> <li>- Baseline for measuring progress<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>- CORDEP and their marketing group</li> <li>- NGO's</li> <li>- Statistics from IBTA</li> </ul>
B. Information on arable land	<ul style="list-style-type: none"> <li>- Ha's of new land that can be cleared</li> </ul>		

<sup>2</sup> Respondents refers to users and potential users interviewed for this report

<sup>3</sup> Progress is here: Change to non-coca and improved yields

C. Employment/Job generation	- Unemployment /Underemployment - Number of jobs created - Activities of women versus those of men		
D. Infrastructure	- Transportation	- Impact on Income	
E. Income	- Distribution of income/wealth - Income derived from coca - Income in general - Income derived from specific crops	- To measure progress <sup>4</sup>	
F. Investment	- Level of diversification of income generating activities - Saving potential - If, and how people save	- Credit programs - Market study where to locate rural bank branches	

Sources: AID personnel La Paz

Gender disaggregated data were required for all data categories. Other sources of data mentioned in general for AID were UDAPE, IMIS-Project and INE.

The data needs listed in Table 2, indicating those for Alternative Development, largely coincide with the data needs mentioned by Dr. C. Joel in his report<sup>5</sup>, Appendix D. Key points on which a Chapare Survey Questionnaire should focus include data like the number of harvests per crop per year, farmers' own estimates of annual output of each crop, amount of labor required per crop per hectare for the first year and the subsequent years, farmers' own estimates of net cash income from each crop and the estimated number of man-months of outside wage labor contracted per annum.

<sup>4</sup>Progress is here the ratio of income generated by coca to income generated by other activities.

<sup>5</sup>Clark Joel, Analysis of AID's Progress Indicators in the Area of Alternative Development, August 1992, AID.

Table 2. Data needs Alternative Development, Chapare

Data related to:	Data needs	Uses	Sources
A. Crop specific Information	<ul style="list-style-type: none"> <li>- All under table 1.A</li> <li>- All coca variables</li> <li>- Where crops are marketed/markets/dies</li> <li>- Total ha's under cultivation</li> <li>- Costs of inputs/Production costs</li> <li>- Rentability of crops</li> <li>- Different varieties of crops and harvest</li> </ul>	<ul style="list-style-type: none"> <li>- All under 1.A</li> <li>- Identify crops that have impact</li> <li>- Indicator for developing markets</li> <li>- Baseline for measuring income and crop production</li> <li>- Credit solvency</li> <li>- Usefull for planning productlines and commercial lines, after harvest</li> </ul>	
B. Employment	<ul style="list-style-type: none"> <li>- Number of jobs created</li> </ul>		- Servicio de Caminos
C. Infrastructure	<ul style="list-style-type: none"> <li>- Roads</li> <li>- Potable water</li> </ul>	<ul style="list-style-type: none"> <li>- Impact of roads and electrification</li> </ul>	
D. Income	<ul style="list-style-type: none"> <li>- Income in general</li> <li>- Income derived from specific crops and from coca</li> <li>- Income differences in general and before/after AD</li> <li>- Other sources of income</li> </ul>	<ul style="list-style-type: none"> <li>- Credit solvency</li> <li>- Measure progress<sup>6</sup></li> <li>- see range of economic activities</li> <li>- Ratio farm income/non-farm income</li> </ul>	
E. Migration	<ul style="list-style-type: none"> <li>- Migration data in general</li> <li>- Specific regional migration</li> </ul>		
F. Credit	<ul style="list-style-type: none"> <li>- Distance to roads</li> <li>- Variables credit</li> </ul>	<ul style="list-style-type: none"> <li>- Distance to roads is used as credit criteria</li> <li>- Impact of IA and Credit on income</li> <li>- Measure impact of credit on income</li> <li>- Measure impact of credit programs</li> <li>- Estimate number of farmers that can get credit</li> </ul>	

<sup>6</sup>Progress is here the ratio of income generated by coca to income generated by other activities

G. Training and education/ Awareness	<ul style="list-style-type: none"> <li>- TA received</li> <li>- Information on communities with/without TA</li> <li>- Attitudes towards coca-processing, cocaine and trafficking</li> <li>- Attitudes towards police and Government</li> <li>- Motivation farmers to ask for eradication</li> <li>- Have coca farmers always been farmers</li> </ul>	<ul style="list-style-type: none"> <li>- Measure impact on income</li> <li>- Define discriminating factors between comunidades</li> </ul>	
H. Environment	<ul style="list-style-type: none"> <li>- Agroforestry data</li> </ul>		

Sources: AID, CORDEP, IBTA, PDAR, AGROCAPITAL Cochabamba

Table 3 reflects the data needs of UDAPSO and UDAPE, which seem to place more emphasis on education data than agricultural production data, and of MACA.

Table 3. Data needs Government Organizations

Data related to:	Data needs	Uses	Sources
A. Income	<ul style="list-style-type: none"> <li>- Degree of income from farm activities</li> <li>- Income distribution</li> <li>- Income ratio Agriculture/Livestock</li> </ul>	<ul style="list-style-type: none"> <li>- Identify effects of structural Adjustment Policies</li> </ul>	
B. Migration	<ul style="list-style-type: none"> <li>- Migration to urban areas</li> </ul>		
C. Education	<ul style="list-style-type: none"> <li>- Education levels</li> <li>- Years needed to graduate</li> <li>- Reasons for delays</li> <li>- Gender-relations</li> <li>- Choices parents make which children may study</li> <li>- Relation education levels of parents and children</li> <li>- Education levels mothers versus health and education levels children</li> <li>- Reasons for school attrition</li> </ul>	<ul style="list-style-type: none"> <li>- Identify regional education needs and set priorities</li> <li>- Policy making</li> <li>- Improve coverage</li> <li>- improve quality of services</li> </ul>	
D. Health	<ul style="list-style-type: none"> <li>- Access to health services</li> </ul>		

Sources: UDAPE, UDAPSO and MACA.

The main sources of information for UDAPE and UDAPSO are Banks, Ministries and INE.

Table 4 lists the data needs of Non-Government Organizations. Since they have more diverse focuses, the list contains 12 informational needs categories.

Table 4. Data needs Non-Government Organizations

Data related to:	Data needs	Uses	Sources
A. Crop Information	<ul style="list-style-type: none"> <li>- Type of crops</li> <li>- Profitability of crops</li> <li>- Crop rotation</li> <li>- Information on share cropping</li> <li>- Destination of production</li> <li>- Values of autocons. of own production</li> <li>- After farm processing</li> <li>- Type and definition of markets</li> <li>- Existence of market niches</li> <li>- Rationale behind choices for destination of crops, for markets.</li> </ul>		
B. Land	<ul style="list-style-type: none"> <li>- Land titles/ownership</li> <li>- Ha's per household</li> </ul>		
C. Livestock	<ul style="list-style-type: none"> <li>- Variables livestock</li> <li>- Involvement women in livestock</li> <li>- Animal traction</li> </ul>		
D. Technology	<ul style="list-style-type: none"> <li>- Use of improved technology</li> </ul>		
E. Employment	<ul style="list-style-type: none"> <li>- Types of employment</li> </ul>		
F. Income	<ul style="list-style-type: none"> <li>- Income levels</li> <li>- Types of income generation/economic activities</li> <li>- Variables for income function</li> </ul>		
G. Migration	<ul style="list-style-type: none"> <li>- Migration flows and - patterns</li> <li>- Types of migratory employment</li> <li>- Reasons for migration</li> </ul>	- Mobility	
H. Credit	<ul style="list-style-type: none"> <li>- Variables on credit</li> </ul>		
I. Education	<ul style="list-style-type: none"> <li>- Education levels</li> <li>- Extension</li> </ul>		
J. Environment	<ul style="list-style-type: none"> <li>- Variables environment</li> <li>- Agroforestry</li> </ul>		
K. Consumption	<ul style="list-style-type: none"> <li>- Home consumption of produce and values</li> <li>- Consumption habits</li> </ul>		
L. Health	<ul style="list-style-type: none"> <li>- Access to water</li> <li>- Sanitation levels</li> <li>- Houses with vinchugas</li> </ul>		
M. Organizations	<ul style="list-style-type: none"> <li>- Membership of Cooperatives, Unions, Production Associations</li> <li>- Participation in Motherclubs</li> </ul>	- Motherclubs create dependancy	

Sources: ASAR, ARADO, CERES, INEDER, FENACOAB, Peace Corps and Planning Assistance

The following alternative sources for information were mentioned: SVEN, partner organizations and NGO's.

The most salient uses in all tables are for *impact studies, baseline data, indicators, policy-making, and for identifying effects and needs*. Monitoring as such was not mentioned in this context, which could be explained by the fact that monitoring mostly takes place at project level and not at higher policy levels (for example at project output level or SO level).

Naturally, a NRHS cannot respond to all these needs. The tables 1-4 may help in selecting the most important key issues. Of course, all the offices should be involved in selecting the questionnaire's key issues.

The four user groups indicated the usefulness of the survey's results as follows:

**Group 1:**

The Cochabamba Rural Household Survey (CRHS) provides descriptive information, and assists in the definition of intervention targets. Survey data are useful to identify what crops have the highest impact and to compare the data with that from other sources.

Data from the CRHS was considered to be useful for policy-making (what policy instruments or interventions have most impact), goal-setting and reporting, and for measuring a demonstration or multiplier effect and thus influencing planning by assisting in the identification of possible alternative intervention targets, and monitoring. Educational purposes were also mentioned. Target-setting could be difficult based only on results of one year, because as such they do not represent trends.

**Group 2:**

For AD purposes, the survey was considered useful for some baseline information like measuring income and general crop production. According to AID sources, there are still markets for certain crops, but crop production is too low to fill those markets. The survey could help in the planning for after farm processing and marketing. Also, the survey might show a multiplier effect on the production of sufficiently specific crops.

Data the survey does not provide (C. Joel, 1992), include information on the distribution of income and wealth, (un)employment, agricultural production and investments.

The survey was not designed to serve as a data base for monitoring the progress of AD. "The survey was not designed to measure absolute levels of crop production or land area under

cultivation. Its chief objective was to measure household income, correlate income levels with a series of socio-economic variables, and to provide a picture of sources of employment and income for rural households"<sup>7</sup>. According to Dr. Caro it is possible to extract from the data base some of the baseline data to see future progress in AD.

If we look at the five strategic objectives (summary SOs in Annex D) and the related programs and projects, the results of the CRHS serve mainly three SO's: AD, Trade and Investment and Family Health.

**Group 3:**

Government Agencies, including INE, all find the survey extremely useful because there are no other data available on rural areas at national level.

**Group 4:**

The CRHS provides baseline data for later comparison and is useful for focusing on special areas that need more attention and to justify working in special areas. The survey's data can be used in project planning for agriculture, income generation development, rural sanitation and natural resources. Further uses are to see the range of economic activities and the ratio of farm-income/non-farm income. The results could also be used for educational purposes: as a basis for up to-date information on rural Bolivia. Finally, it could be used in the case of Peace Corps for submitting information on Bolivia to Washington.

<sup>7</sup>Deborah Caro, James Riordan and Melissa Cable, The Cochabamba Rural Household Survey: Preliminary Findings, October 1992, AID.

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### III. NRHS: EVALUATION AND ANALYSIS

#### A. Survey Design, Choice of Unit of Analysis, Universe and Oversampling

The Survey was designed to generate information on basic socio-economic characteristics of rural households in Bolivia, and not to estimate crop production or crop areas. A remark about the stratification (dispersed zones/population centers and three ecological zones) was that the current ecological zones do not cover the Andean reality and biodiversity.

The NRHS covered population centers with less than 2,000 people, while the third round of the IHS should cover towns with from 2,000 to 9,999 people (PP). However, UDAPE indicated that the last IHS was conducted in population centers of more than 10,000 people, thus leaving a gap of interviewed population centers between 2,000 and 10,000 people. To fill this gap, UDAPE suggested that the NRHS and the IHS have towns with 5,000 people as a discriminating factor.

One of the respondents recommended that the number of households sampled should correspond to the actual number of households in the specific regions. The demand for the variables listed in Tables 1-4 above, especially the income variables justify the rural household as a unit of analysis, and in general very few people questioned the household as a unit of analysis.

Discussion about the universe concentrated on the following options: 1. Cochabamba, 2. Bolivia nationwide or 3. specific selected key regions or regions selected by poverty indicators.

Reasons given for conducting the survey in Cochabamba only are that it better serves AID's needs. A consequence is that it will be a survey conducted by AID, and possibly not compatible with the previous one. A compatible survey would have to use the same INE maps, and INE's collaboration would be necessary.

A nationwide survey was supported by all non-AID respondents, BUCEN and a number of AID officials. The "AID" rationale behind a nationwide survey is that AD also seeks expanded employment in other Departments. Besides, PL-480 and some other programs are also nationwide (as well as programs of other users). AID arguments against a nationwide survey were the costs (i.e. updating all the maps, etc.) and the administrative project management burden. One design consideration for a nationwide survey from a policy-making point of view might be the existence of extremely rich households in some departments with unknown influences on statistical outcomes. This might be solved using different expansion factors, excluding these households or making sub-variables of incomes above a certain level.

The third option concerns the selection of key-regions, for example based on the poverty map prepared by UDAPSO, or based on other to be specified themes.

Oversampling of a specific geographic area for specific AID monitoring uses could be accomplished, and still be compatible with the rest of the samples. You could have, for example, production estimates with a household frame, increasing the sample size. The advantage of (regional) oversampling is a higher reliability which must give results to justify the extra costs involved. The disadvantage of using the same national questionnaire is that the topics are too general for specific AID monitoring objectives. Hence, one could consider the possibility of taking a subsample every X years for monitoring purposes.

#### B. Design of the Questionnaire

Most of the respondents find the questionnaire too long. Average interview time was one hour and twenty minutes, ranging from 15 minutes to two hours and 40 minutes. According to BUCEN the questionnaire was formatted to minimize entry errors, e.g. it has a lot of instructions for the interviewers. This explains its volume (49 pp.). On this basis, BUCEN justified the length of the questionnaire.

For the development of baseline data, the amount of variables in the questionnaire was considered too much. The use of a nationwide design for the Department of Cochabamba was open to doubt.

There are a lot of gender and age disaggregated questions. Section 6 asks who are the owners of different livestock, section 9 who is preparing products, although this is not combined with what they are preparing. Sections 11, 12, 13 and 14 are also disaggregated (migration, occupations, health and credit respectively).

A number of respondents questioned the biased concept "jefe de hogar" (head of household), to have real analytical value, since it precludes adequate responses pertaining to female activities, because the head of household will not be fully knowledgeable of the other gender's activities.

A GO commented that the survey is too much oriented to production instead of households.

Some general remarks for avoiding non-sampling errors were about:

- \* Importance of capacity of the interviewer to translate the Spanish into Quechua because of conceptual differences. One question may be totally differently interpreted by several persons.

- \* A possible difference between "felt and real needs".
- \* Manuals for a survey at the national level must include instructions for regional differences.
- \* The reliance on seasonal differences for many data. If data are asked at a time when the household just sold products and has money, extrapolated data may be less reliable.

More detailed remarks about possible changes and omissions regarding the questionnaire you will find in Annex E.

### C. NRHS specific information

All information could have been obtained from other surveys, but only the NRHS relates the information to rural household income on a systematic basis.

The Encuesta Agropecuaria, that has information on production to capture income, uses an area sample frame, and therefore cannot be combined with the NRHS, unless there is a good area frame.

At the moment, INE is involved with several surveys important to Rural Development:

1. National Agriculture/Livestock Survey (NALS) (Encuesta Nacional Agropecuaria or ENA)
2. National Survey on Follow-up and Consumption of Food (NSFCF) (Encuesta de Seguimiento y Consumo de Alimentos or ESCAN)
3. National Rural Household Survey (NRHS) (Encuesta Nacional de Hogares Rurales or ENAHR)
4. Agricultural Census (Censo Agropecuario)

The ENA gathers information on production and areas by products using an area sample frame and could capture income, but is not linked to households. Hence, the ENA cannot be "combined" with the NRHS.

ESCAN captures information on food consumption linked to nutrition and has the household as a unit of analysis. This ESCAN must be conducted on a more frequent basis to omit seasonal influences. ESCAN is meant to help define nutritional policies (see Annex E).

The NRHS has the household as a unit of analysis like ESCAN, and determines household income, measuring mainly economic production variables. Other important and linked variables include water, markets and marketing, credit, education, roads, land titles etc., these are used to link social and infrastructural indicators to income levels.

The Censo Agropecuario, which was done in 1954 and in 1984, may be repeated as a pilot study in 1993.

Many surveys and studies are carried out in Cochabamba and the Chapare in particular by several organizations, but surveys have never been documented systematically, so there is no access to this information. There should be thus more coordination in surveying and documenting. Farmer's weariness being interviewed was also mentioned as an increasing factor that hampers survey work and reliability of the results.

For AD purposes, a pilot project (Bolivia IMIS Project) has been initiated with two Centrales in the Chapare, but this project still does not provide some necessary data.

#### D. Data Analysis and Reliability

So far, Data Analysis Publications were issued officially the 7<sup>th</sup> of October 1992, while a draft was handed out long before. A principal constraint on this project output was delay in data processing. This publication constitutes a selected group of results, of descriptive and not analytical nature, according to the Mission's requests. A second in-depth analysis will be done by December 1992 by BUCEN, GENESYS and LAC TECH, including: 1. multivariate assessment of the potential impact of different policy instruments on different type of rural households, 2. disaggregation by gender and other variables of labor use within rural households, 3. examination of non-farm economic activities of rural households and their contribution to net household incomes, and 4. examination of arrangements for marketing farm produce and relationships between market access and net household incomes. All four further in-depth analysis do coincide with listed data needs and uses in Chapter II.

Some of the remarks about the first Data Analysis can be summarized as follows:

At first view, it is not clear whether farm size (p.9) refers to Total Farm Size or Cropped Farm Size.

Answer No. C (improve standard of life) in Table Household Needs of the Data Analysis Publication, should not be included as an answer to question 15.4 that read: "What would you need to improve your standard of life"?

For main variables, BUCEN used coefficients of variation of less than 15%, and samples were designed according to this. Most of the variables meet this test of 15%. Some COV are higher, but this is due to a smaller sample size.

Interviewers were highly educated, with knowledge of agricultural practices, they spoke Quechua, and were well trained for their job, so as to avoid as much as possible non-sampling errors. During data entry, several controls were built-in to check and re-check transcription of data.

### E. Institutional assessment for NRHS

This paragraph reflects people's opinions on the implementation of the CRHS and how a future survey financed by AID should be directed.

The experience in the last year taught that it was difficult to work efficiently with INE, for several reasons. As a result, some respondents are against another project with INE, since they feel the limiting factors of INE have not changed. An explanation for INE's attitude towards the NRHS might be that it felt it was not fully involved from the beginning to the end in the preparation and the design of the project.

If AID were to execute the survey alone, this could perhaps be cost effective, but would contribute less to GOB institutional capacity building.

According to UDAPE, INE is by law the institute to do national surveys, and they have the infrastructure to do surveys, so all surveys should be under INE's direction. Accepting that USAID had its reasons for limiting the survey to the Department of Cochabamba, this is considered incidental to the original purpose of the survey. UDAPE feels that future similar events would weaken INE's position and credibility.

There is also a discrepancy between INE's and USAID's cost structures, since INE works with lower budgets. The fact that AID pays relatively high salaries to contracted personnel may make it more difficult for INE to find personnel. In INE's opinion, giving money or gifts to people for getting an interview makes it difficult for organizations with lower budgets to implement their surveys, since the interviewed people would not be willing to answer unless they get some money.

Most AID personnel and all GO's think INE should be involved in the next survey. Past experience raises the problem: How? The following are some suggestions of respondents:

INE suggests that each Department in Bolivia should have its own team with its own administration and budget; however, INE is obliged by law to follow certain procedures, such as buying materials etc. They do not object to contributions of external experts.

UDAPE suggests a team of INE personnel with external experts if necessary, or the possible delegation of work, such as updating cartography. The team must be under the direction of an INE-coordinator who can be called to account to the INE Director, and who can report to USAID. To encourage the personnel, the finance could include topping of INE salaries (However, AID is not allowed to "top" salaries).

Uk

According to BUCEN, there should be an implementing NRHS-team and Director managing their own funds, who only work on the survey.

UDAPE argues that it cannot be responsible for the survey's administration and operation, because its objective is to analyze information and not to generate it. Secondly, its goal is to strengthen and support public institutions (e.g. INE) in their tasks, such as training and technical assistance. However, UDAPE could support the survey team with technical assistance. By taking over the survey UDAPE feels it would weaken INE's position.

Opinions over which office should be the responsible in AID also vary, i.e. whether it should be ARD or the Economics office. The organization went to the Economics Office, because it was too time consuming for ARD. The Economics Office should contract a full-time Survey Manager, who is a professional Survey Statistician, since the Economics office has only two staff members.

According to the Economics Office it is not strictly necessary to hire experts of BUCEN, since there is already a basic survey design.

#### IV. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

##### Have the Goal, Purpose, Survey Outputs and Objectives been achieved?

In the first place, the original goals and objectives of the project have <sup>NOT</sup> yet been achieved due to the fact that the survey has been conducted in the Department of Cochabamba. As far as I know, there has been no formal modification of project objectives, implying a discrepancy between the original project design and the implemented project. However, I will use the original goals and objectives and evaluate whether these were met by the Cochabamba Rural Household Survey. The goal and purpose have been partially met, although only for the Department of Cochabamba. Many of the respondents indicated the importance of these data to their development planning and implementation. However, a nationwide survey would have been even more useful.

Survey outputs were partly achieved, assuming that survey results are available and accessible to users. The methodological documentation currently has a limited distribution. There are no statistical tables distributed by INE. Data tapes and diskettes will start to be distributed. The Data Base should be accompanied by a User's Guide which is planned for preparation (but not completion) in February-March 1992 (PP P. 29). A data users seminar was held October 7, 1992, but should have been held at the conclusion of the survey according to the PP. Official Data analysis publications were distributed during and after the users' seminar, although some offices had a draft before October 7. The survey outputs were thus severely delayed. In my opinion, this was due to lack of promotion of the project from the beginning and the failure to officially modify the Implementation Schedule (PP. Table 2, p. 24-29).

At this moment the data from the survey cannot be compared with the previous one (1978). According to James Riordan, this data base may no longer be available in Bolivia. The other four main analytical objectives have been achieved or will be achieved in the future, although only for the Department of Cochabamba.

In some parts of Cochabamba there was excessive rainfall and in others drought. This should be taken into consideration when using the survey's data as a baseline against which to estimate progress. It might be useful to link the survey with rainfall data. The survey may provide data on project impact, especially when repeated every 3 to 5 years. In-depth analysis may also provide the most appropriate input to policy instruments. The PP gives an example of this on page 10.

The Project Agreement between the GOB and USAID/Bolivia mainly concerned financial administration. I would be strongly in favor of a more detailed description of commodity handling,

responsibilities and rights of contract signers, finance conditions, and procedures when obligations are not fulfilled.

Despite the fact that the original goals, etc., were not fully achieved, respondents praised the excellent survey preparation and implementation and the quality of the data and analysis.

#### RECOMMENDATIONS:

1. Any changes in project design or implementation should be accompanied by a PP supplement stating new objectives, implementation procedures, time tables, responsible agencies, etc.
2. There must be more project promotion and a publicity campaign, since potential users appeared to be partially or fully ignorant about the survey's existence.
3. There must be a good User's Manual for the survey's SPSS data base diskettes to make users aware of the possibilities for data analysis.
4. There must be a more detailed Project Agreement including an implementation schedule in order to avoid problems as experienced during the survey implementation.
5. There should be no delay in Data Analysis Publication, since users are reluctant to attribute credibility to the survey's results, or may lose their interest in the survey's results. Data Analysis Publications services should be well marketed, indicating application procedures for future analysis, and publications sent to as much (potential) users as possible.

What is the usefulness of the CRHS or a NRHS, how should it be implemented and whose needs should it serve?

The usefulness of the CRHS for all four potential user groups has been demonstrated in the previous sections. For AD purposes however, the survey's results are insufficient to cover data categories like crop specific information, employment, income, migration, education/awareness and environment. Survey results are less reliable at provincial level, and AD mainly concentrates on the Chapare province.

#### RECOMMENDATIONS:

6. Since the NRHS and also the NRHA do not provide all the necessary data for AD, the last should maintain an independant and focused data collection system, and:
7. A choice has to be made to do a survey that serves solely

AID's needs (while others may use the results), or to assist a national statistics institute in its institution and capacity building by (if necessary conditioned) AID financing, and to serve all potential user needs. These two options could result in two totally different surveys.

USAID has to contemplate what are its own objectives and departure points are for financing a survey (and this should be in the Project Agreement or the PP), outside the technical ones listed in the PP.

The existence of many surveys, especially in the Chapare, creates certain attitudes of farmers towards surveying, which results in less reliance of the results. There exist a lot of diagnostic papers and reports about rural Development in the Department of Cochabamba and the Chapare.

#### RECOMMENDATION

8. The existence of many surveys, reports and diagnostic papers, call for a systematic documentation.

The support for a nationwide survey underlines the rationale behind a nationwide NRHS to be conducted in 1993 or 1994. However, the existence of other nationwide surveys important to Rural Development, needs adjustments of the NRHS. Also, the length of interview and the focus of the questionnaire must be improved as mentioned in III.B.

#### RECOMMENDATION

9. Conduct a nationwide survey, with a more focused and adjusted questionnaire. The average interview time must be shorter. No money should be given to interviewed farmers, since this would monopolize the possibility of implementing surveys only for organizations with relatively high budgets.

To know how to ask a question to obtain specific information it may be useful to know how rural households keep their records.

Most of the respondents advocated a nationwide survey, implemented by INE. A survey must be administered by an INE team at national level, and regional offices with considerable independancy. INE probably has no objections against a conditioned finance or external experts, but INE must be involved and fully participating from the beginning to the end.

#### RECOMMENDATION

10. A national survey should be administered by INE with a decentralized structure, and independant fund handling for each of the regional offices.

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**ANNEX A: SCOPE OF WORK**

## ANNEX B: METHODOLOGY

The methodology used for the CRHS evaluation was to interview 51 persons. A number of them were involved in the implementation of the survey, other were interviewed being potential users of the survey. The Evaluator spent 3 days in Cochabamba and 18 days in La Paz. Discussions focused on the issues identified in the Scope of Work.

A number of documents were studied, related to the survey and Mission's policy. Persons contacted and documents reviewed are listed in the Appendices to this report.

## ANNEX C: PERSONS AND INSTITUTIONS CONTACTED

### AID

- \* Sigrid Anderson, Deputy Director HHR)
- \* Sonia Aranibar, DP&E
- \* Melissa Cable , Project Manager ENAHR
- \* Lorenzo de Coste, MSI, Monitoring and Evaluation of Strategic Objectives, esp. AD
- \* Charley Hash, ARD
- \* Hernan Muñoz, ARD, Project Coordinator ENAHR
- \* Jonathan Sleeper, ARD
- \* Liza Valenzuela, Deputy Director T&I
- \* Fernando Mollinedo, Statistician
- \* Kenneth Beasley, Head of Economics Office
- \* Oscar Antezana, Economics Office

### WORLD BANK

- \* Juan Carlos Aguilar, Economist

### PLANNING ASSISTANCE

- \* Charles Patterson, Director

### FIS

- \* Javier Medina, Director
- \* Freddy Mercado

### FENACOB

- \* Oscar Sanzetenea, Technician
- \* Rodolfo Arce, Technician

### PEACECORPS

- \* Donald Peterson, Director
- \* Diane Hibino, Director of Training

### MINISTERIO DE PLANEAMIENTO

- \* Teresa Menacho, Adviser

### USA EMBASSY

- \* Ray Dalland

### BUCEN

- \* Miguel Cuevas

### LAC TECH

- \* James Riordan

### INE

- \* José Luis Lupo, Director INE
- \* Jan Bartlema, Adviser analysis of Social Statistics
- \* Luis Pereira, Social Statistics
- \* Luis Zapata, Social Statistics
- \* Arnaldo Aliaga, Social Statistics

### GENESYS

- \* Deborah Caro

UDAPE

- \* Candia, Gaby, Chief of Agricultural Division
- \* Ronnie Pereira
- \* Juan Carlos Requena, Director UDAPE

MACA

- \* Hector Nogales, Director of Statistics

UDAPSO

- \* Manuel Contreras, Director
- \* David Murillo, Statistician
- \* Bertha Pooley
- \* Rodrigo Villareal

OTHERS

- \*Joel, Clark, Economist Consultant

COCHABAMBA

AID

- \* Harry Peacock, Survey specialist
- \* Tex Ford

DAI

- \* Jack Rosholt, Director

INE

- \* Ariel Rocabado, Chief of Department

PDAR

- \* Bernardo Rocabado, Executive Director

PLANNING ASSISTANCE

- \* Rene Marquez, Technical Director

IBTA Chapare

- \* Francisco Zanier, Director

ARADO

- \* Leonor Somoza, Director

ASAR

- \* Carlos Quitón, Director

CERES

- \* Roberto Lacerna, Director

INEDER

- \* Beatriz Morales Official Women in Development

TUKUYPAJ Agro-exportación para todos

- \* Tonny Tekelenburg Adviser

AGRO CAPITAL

- \* Arvin R. Bunker, Director General

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## ANNEX D: REVIEW STRATEGIC OBJECTIVES

Using the latest Action Plan (1993-1997), The SO's<sup>8</sup> will be briefly summarized.

### Alternative Development

This SO is aimed at transforming the Bolivian economy through increased employment, income, investment and productivity in non-coca activities<sup>9</sup>.

USAID's strategy for AD holds that, in order for the labor force to be able to abandon coca cultivation and processing, viable economic alternatives must be available, not limited to the immediate growing areas. USAID's AD efforts are aimed to promote new licit sources of income, foreign exchange and jobs within Bolivia. The strategy aims to help compensate for the impact of coca on the Bolivian economy and labor force as eradication and interdiction efforts proceed to reduce the illegal coca/cocaine industry within the country. The success depends in part on the market price of coca, which is affected by law enforcement. The GOB's program contemplates phased, voluntary, compensated eradication of all legally grown coca currently used for illicit cocaine production. It also includes continued enforcement of laws prohibiting coca cultivation in additional areas.

The strategy, implemented at micro/macro levels, is to be achieved by replacing lost foreign exchange earnings, income and employment provided by the illegal cocaine industry, and promoting equitable economic opportunities for men and women who have worked or are likely to work in that industry.

### Trade and Investment

This SO is aimed at increasing non-coca trade and investment that are key-elements in the achievement of broadly-based, sustainable economic growth in Bolivia, and supporting other SOs. At the macro-economic level two key indicators were selected to measure progress:

1. Increased non-traditional exports
2. Private investment as a percent of GDP

The program focuses mainly on two areas: supporting Bolivia's integration with international markets, and encouraging improvements in domestic financial markets. In the first area, USAID/Bolivia is therefore concentrating on export promotion activities, among which are direct technical assistance to private exporters, and supporting Alternative Development

<sup>8</sup>The SO's have been subject to some rephrasing since the Survey was initiated

<sup>9</sup>This SO might be reformulated since "to transform ... into non-coca activities" implies that the Bolivian economy is totally dependant on coca.

exports.

In the second area, the Mission focuses on the provision of formal financial services for the informal sector, attracting foreign investment, and privatization.

#### Strengthening Democracy

This SO is to improve the effectiveness of democracy. The principal vehicle of the program for long term democracy in Bolivia will be institutional reform. The focus of the program is reflected in three program outputs: 1) improve the application of the law and strengthen the law-making process; 2) improve public sector financial management and control systems; and, 3) increased citizen participation in decision-making.

Concerning the first area, the general court system in Bolivia suffers from mismanagement of criminal cases, bureaucratic procedures and lack of uniformity. Therefore Mission interventions will focus on the installation of uniform procedures, and support of the development of a national commission for law reform.

In the second area, Mission interventions will assist with the implementation of the SAFCO law in several ways.

In the third area, the Mission has a number of projects and activities to support this program output, such as training programs, and promoting the participation of the rural and urban populations in the design and implementation of activities.

#### Family Health

This objective is to improve the health of family members in communities throughout Bolivia. The program is focused on four outputs: 1) Improvement and Development of Health Policy; 2) Institution Building in the Public and Private Sector; 3) Improvement of Knowledge, Attitudes and Practices (KAP) Regarding Health; and, 4) Improvement of Community Health Infrastructure.

The first area involves the the development and adherence to law and regulations that directly affect the availability of family health services, and health practices. It also addresses the public budget, government expenditures, cost recovery, third party payments and privatization. Another objective is to move the Ministry of Health toward more preventive functions, and permit the more efficient private/NGO sector to provide curative services.

The second area concerns improving the long-term capacity of public and private health care providers to address preventive and curative health care needs.

The third output is addressed by integrating KAP studies and information, education and communication strategies in all Mission family health projects undertaken with the Ministry of

Health and with NGOs.

The fourth area will be to address the lack of basic health infrastructure in many communities, such as potable water, sanitary facilities and sources of nutritional foods.

#### Environment

This strategy is aimed at reducing degradation of forest, soil and water resources. The emphasis on the environment is still in the developmental stage. Therefore, it is necessary to build clear consensus on the key environmental and natural resource constraints and opportunities. Secondly, it is important to improve public and private institutional capacity for sustainable resource use and environmental protection. Furthermore, it is important to increase public awareness and strengthen sustainable forestry, soils and water management initiatives.

## ANNEX E: POSSIBLE CHANGES AND OMISSIONS QUESTIONNAIRE

This annex shows detailed remarks respondents made about each of the sections of the questionnaire.

### Section 1

- \* Characteristics of the household: One should not begin by asking for the assets people have.
- \* Indexed salt: Coordinate this with Pronalcocho.
- \* Omit, from analytical point of view associated crops, because there is not much crop mixture in Cochabamba.
- \* For analytical purposes, it would be easier to aggregate some of the input expenses.

### Section 2

- \* Many farmers have no official landtitles.

### Section 3

- \* Probably the age of plants should be included.
- \* Probably include depreciation costs of perennials.
- \* Perennials: also include associated crops.
- \* The 1979 Rural Household Survey revealed many farmers were no owners of the land, and had to share the harvest with the landowners. As a consequence, more annual crops were planted.
- \* Question 3.13: How was part of production paid to land owner included in the calculation of farm income?

### Section 4

- \* Question 4.2-4.3: Review access to transportation (= time you need to reach a market) and roads.

### Section 5

- \* Questions 5.15 and 5.16: Easier to ask for work days per activity and 5.20 to ask what they paid per tarea.

### Section 6

- \* Revise livestock section by a livestock expert as well as other livestock expenses, because this was not done before.
- \* Livestock forms an important part of income too. Information in this area might give more details on how to improve livestock production.
- \* Questions 6.1-6.10: They do not ask for new born animals.
- \* Question 6.8 and 6.9: Buying animals can be used as savings.

### Section 9

- \* Questions 9.8-9.10: Only income was asked for and not the production costs.

### Section 10

- \* Parts of household expenses (p.29) can be omitted (soap, shampoo, knives etc.) Nobody would ever remember how much they spent on this in a whole year. Besides, male respondents may not be knowledgeable and accordingly, information would be unreliable. It takes too much time thinking about it. This should be a separate survey.
- \* Question 10.1: Costs made for food may vary throughout the year, depending on whether the family has money at hand or not. It is very difficult to make an annual extrapolation. This also accounts for 10.5 and 10.6. This kind of information has to be gathered by a different type of survey on a more frequent basis. Some of the total costs asked for in 10.8-10.18 could be very difficult to remember and sometimes there are multiple uses.

### Section 11

- \* Review migration by a migration expert.
- \* There seems to be a contradiction between question 11.1 (definition of habitual resident) and question 11.11: Is a person absent for more than 6 months still a habitual resident?

### Section 12

- \* Section 12 is good, but needs further review, since the households without coca earn about twice as much as households with coca according to M. Cuevas findings.
- \* Definition of Unremunerated Family Worker is not correct. Even a family member will get something for work done, although not necessarily money. This concept must be compared with that in the Census and the IHS, for consistency of definition.
- \* Question 12.11 is less relevant in Cochabamba.

### Section 13

- \* The health section should probably be omitted. Other surveys, as the DHS (every 5 year), should cover this aspect. It was included at requests of UNICEF and the World Bank.
- \* Health concepts should be more homogeneous with other encuestas, if included.
- \* Question 13.16: It is important to know which vaccinations an individual received and whether or not they received the complete series. Sometimes people do not know which they have had.
- \* Question 13.17-13.19: It is important to translate these into comprehensive questions, i.e. if you have a scar or vaccination in the upper arm instead of asking for BCG.
- \* To gain more cooperation from women it would be a good idea to start with health.

### Section 14

- \* Important section, because of loans provided to farmers.

### Section 15

- \* Question 15.1-15.2 lacks information on course application.
- \* Question 15.4 was considered important, to give the farmer a feeling that one cared for their needs. An important point however is, that these needs reflect 90% of the needs of men and only 10% of the needs of women, because 90% of the respondents were men.

Sources: Rene Marquez, UDAPSO, UDAPE, Miguel Cuevas, James Riordan, Jonathan Sleeper, Hector Nogales.

Rene Marquez also wrote a report on possible improvements of the questionnaire.

BUGERENCIAS SOBRE MEJOR MANEJO  
DE LA BOLETA ENAHR

ESTADO DE LA ENTREVISTA

Cambiar entrevista parcialmente completa por:  
Entrevista incompleta  
Utilizable  
No utilizable

SECCION 1

- 1.4 Personas que viven y no pagan alquiler
- 1.7a Aclarar mejor los conceptos 1 y 2.
- 1.9 Anular código 5.
- 1.10 Considerar carretilla como tenencia.
- 1.12b Cambiar la formulación de la pregunta.

SECCION 2

Cambiar la pregunta 2.2 a la 2.1  
En la 2.1 preguntar cuanto de terreno se trabajo.  
2.3 Incluir en tenencia, herencia con código 6.  
2.21 Cambiar rotación por recuperación fertilidad.

DIBUJO O CROQUIS DE PARCELAS

- Mayor puntuación de las características más importantes de los cultivos principalmente del manual.
- Referencias claras de las parcelas de acuerdo al lugar.
- Preparar anexos de todos los cultivos anuales independientes, anuales asociados, permanentes independientes y permanentes asociados.

SECCION 3

3.5 y 3.13 Habilitar otra columna para superficie cultivos en sociedad o compañía en anuales y permanentes.

3.6 y 3.14 En destino de la producción habilitar una casilla para cantidad de semilla guardada.

- Cambiar el término destino por acción directa.
- Hacer un recuadro o destinar un espacio para equivalencias.
- En las pestallas de cultivos dividir en:
  - 1- Cultivos anuales independientes y Cultivos anuales asociados.
  - 2- Cultivos permanentes independientes y Cultivos permanentes asociados.
- Preparación de anexos con rendimientos y costos de todos los cultivos.

SECCION 4

4.1 No hacer ventas pasar a la 4.10  
4.9 Incluir en la feria:

Comisario  
Romano

SECCION 5

- Habilitar en la 5.5 el mismo cuadro que la 5.2.

- 5.14 Cambiar el flujo a la 5.20:
- En la 5.15 preparar un cuadro más representativo para calculo de jornales.

CULTIVOS	Número de personas contratadas para prepararse terreno	la siembra	cosecha	otros datos	Otros datos de la actividad (relacionados)

- 5.21 Añadir contratista
- 5.29 Ampliar el concepto de la pregunta ya que el socio puede ser productor agropecuario.

#### SECCION 6

Invertir 6.1c por 6.1 d

6.1 a la 6.10 analizar con mayor profundidad para captar información más coherente y proxima a la realidad.

6.21 Incluir producción de queso en vacas , ovejas y cabras.

#### SECCION 7

7.8 Añadir de la feria

#### SECCION 8

8.1 Ampliar la pregunta a alimentos concentrados y forrajes.

8.3 Desglosar los servicios del veterinario y precio productos.  
- Cuantas veces contrataron los servicios de un veterinario.

#### SECCION 9

Si no hay 6.1b, 6.1e o 6.1 f pasar a la 9.7.

Productos elaborados definir monto de ganancia establecer el ingreso neto.

#### SECCION 10

10.7f Entierros familiar y no familiar.

Trasladar 10.14 y 10.15 a otros ingresos.

10.19 Añadir asociaciones,

#### SECCION 11

#### SECCION 12

12.1 Ampliar con otras actividades,

12.3 Cambiar pastoreo por manejo de animales.

#### SECCION 13

13.4 Un parto, nació vivo y murió

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**ANNEX F: ENCUESTA DE SEGUIMIENTO Y CONSUMO DE ALIMENTOS**

# PERFIL ENCUESTA DE SEGUIMIENTO DEL CONSUMO DE ALIMENTOS NACIONAL ESCAN

## I. ANTECEDENTES

La Encuesta de Seguimiento del Consumo de Alimentos, se realizó en principio por iniciativa de la Junta del Acuerdo de Cartagena (JUNAC), organismo que propicio reuniones técnicas.

En diciembre de 1987 en Caracas Venezuela, se celebró la Reunión Técnica Subregional de Evaluación de las Encuestas de Consumo de Alimentos de Perú y Venezuela", donde se determinó la importancia de aplicar estas experiencias en el resto de los países de la subregión.

Posteriormente Bolivia presento un proyecto de investigación titulado "Propuesta para la Implementación de la Encuesta de Seguimiento del Consumo de Alimentos Prueba - Piloto".

En Mayo de 1989 se efectuó en la sede de la JUNAC la tercera reunión sobre la mencionada encuesta de los países miembros, en la que se dió a conocer las posibilidades de apoyo y las proyecciones de este Subproyecto y donde además se establecieron los criterios metodológicos que deben considerarse para futuras investigaciones dentro del contexto de los países miembros.

La Encuesta de Seguimiento del Consumo de Alimentos dentro la JUNAC formaba parte del "Programa de Fortalecimiento de los Sistemas Estadísticos Agro-alimentarios de la Subregión Andina", contenido en el programa de cooperación técnica APIR NO. ALA/88/6 suscrito entre la Comunidad Europea y JUNAC.

En septiembre de 1989 Bolivia con fondos de la JUNAC, inicia la prueba piloto en área urbana y rural, para cuyo efecto aplicó dos metodologías a saber:

- Método de Recordatorio de 24 Horas/Hogar, el cual consistió en traer a la memoria del ama de casa o persona que prepara los alimentos sobre el tipo y cantidad de alimentos que utilizó, para el consumo un día anterior a la encuesta.

Este método valora el consumo efectivo de alimentos de los hogares.

- Método de Abastecimiento de Alimentos en el Hogar, orientado a recordar al ama de casa o persona que realiza las compras, todos los alimentos que se proveyo en el período de la semana anterior a la encuesta, especificando la cantidad, unidad de medida, frecuencia, valor, lugar y situación de abastecimiento.

Este método valora el consumo aparente de alimentos de los hogares.

El objetivo de la prueba piloto fué evaluar las técnicas de recolección de datos, la funcionalidad de los cuestionarios, manuales y el tiempo de aplicación.

La evaluación de esta etapa dió como conclusión que el método de Abastecimiento de Alimentos, no es el más adecuado a las condiciones del área rural boliviana, debido al alto índice de analfabetismo de los informantes y/o porque no existe la seguridad de registrar los datos con la precisión que exige la encuesta, también se observó que el hecho de dos entrevistas en el período de una semana incrementa el tiempo y costos de operación. Por tanto, el método de Recordatorio de 24 Hrs., es más conveniente porque permite captar una estructura más amplia del consumo de alimentos y su medición nutricional se basa en el consumo efectivo y no aparente como ocurre con el anterior método.

En base a estos resultados se planificó la Encuesta, que por decisión técnica y costo se implementó en el área rural del departamento de la Paz, durante un año calendario.

A medio término del estudio, el proyecto dejó de percibir el financiamiento de JUNAC, motivo por el cual se efectuó trámites con Instituciones locales para su financiamiento a fin de evitar su paralización por tratarse de una encuesta continua. A partir del segundo semestre la Encuesta es financiada por el Banco Mundial hasta su conclusión, cuyo organismo sugiere la incorporación del módulo de mediciones antropométricas a los niños menores de cinco años, información que complementa el estudio profundizando el análisis de la situación nutricional.

## II. JUSTIFICACION

En Bolivia los estudios realizados sobre " Consumo de Alimentos" a nivel de hogares son puntuales en el tiempo espacio y con aplicación de diferentes metodologías, aspecto que hace difícil su comparabilidad y por tanto su representatividad a nivel nacional.

El vacío de información en cuanto a este tema, limita los lineamientos de la seguridad alimentaria regional y nacional y en consecuencia la formulación de políticas del sector.

Siendo la alimentación una necesidad vital del hombre y su impacto uno de los flagelos más prevalentes en el área rural de Bolivia se hace indispensable contar con información actualizada, oportuna y confiable que permita a los niveles de decisión el fortalecimiento de la política social y la intervención de programas que coadyuven a una mejor alimentación y disminución de las altas prevalencias de desnutrición registradas en el área rural de Bolivia.

Por otra parte, la experiencia desarrollada en la implementación de la Encuesta Continua en el departamento de La Paz, hace viable la optimización de recursos económicos y humanos por cuanto la metodología e instrumentos se tienen ya elaborados, lo cual reduce el cronograma de actividades.

Los resultados, conclusiones y recomendaciones a las que se arrive en esta investigación servirá de apoyo a otras investigaciones.

### III. OBJETIVOS

#### 3.1. OBJETIVOS GENERALES

- Proporcionar información sobre alimentación, nutrición y su relación con las variables socioeconómicas de los hogares rurales del territorio nacional por trimestre y año.
- Obtener información en alimentación y nutrición por áreas agroecológicas de las diferentes regiones del país y su relación con el contexto socioeconómico de los hogares.
- Conocer la situación alimentaria-nutricional de los hogares diferenciados según el tipo de asentamiento poblacional sean estos centros poblados menores a 10 000 habitantes y áreas dispersas en el país.

#### 3.2. OBJETIVOS ESPECIFICOS

- Establecer el abastecimiento de alimentos considerando las variables: forma, frecuencia, lugar y situación de abastecimiento de los hogares encuestados.
- Determinar la estructura del consumo de alimentos de los hogares rurales del país.
- Estimar el costo de la dieta básica.

- Determinar la cantidad media per-cápita del consumo de alimentos.
- Estimar las variaciones del consumo de alimentos según los niveles de ingreso declarados de los hogares.
- Estimar la elasticidad de la demanda de alimentos por periodos temporales.
- Calcular el suministro de Energía y Nutrientes del hogar/día, su adecuación y brecha respecto a las recomendaciones nutricionales.
- Determinar la adecuación del suministro de energía, proteínas y su relación con las variables socioeconómicas del hogar.
- Establecer el estado nutricional de los niños menores de cinco años según los indicadores talla/edad, peso/talla y peso/edad.
- Conocer algunos hábitos alimentarios.
- Evaluar el estado nutricional de los niños menores de cinco años y su relación con las variables socioeconómicas del hogar.
- Analizar el contexto socioeconómico del grupo de niños con elevado índice de riesgo nutricional
- Elaborar y/o adecuar todos los instrumentos necesarios para el análisis proceso e interpretación de los datos.

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## ANNEX G: SUMMARY OF RECOMMENDATIONS

1. Any changes in project design or implementation should be accompanied by a PP supplement stating new objectives, implementation procedures, time tables, responsible agencies, etc.
2. There must be more project promotion and a publicity campaign, since potential users appeared to be partially or fully ignorant about the survey's existence.
3. There must be a good User's Manual for the survey's SPSS data base diskettes to make users aware of the possibilities for data analysis.
4. There must be a more detailed Project Agreement including an implementation schedule in order to avoid problems as experienced during the survey implementation.
5. There should be no delay in Data Analysis Publication, since users are reluctant to attribute credibility to the survey's results, or may lose their interest in the survey's results. Data Analysis Publications services should be well marketed, indicating application procedures for future analysis, and publications sent to as much (potential) users as possible.
6. Since the CRHS and also the NRHS do not provide all the necessary data for AD, the last should maintain an independent and focused data collection system.
7. A choice has to be made to do a survey that serves solely AID's needs (while others may use the results), or to assist a national statistics institute in its institution and capacity building by (if necessary conditioned) AID financing, and to serve all potential user needs. These two options could result in two totally different surveys.
8. The existence of many surveys, reports and diagnostic papers, call for a systematic documentation.
9. Conduct a nationwide survey, with a more focused and adjusted questionnaire. The average interview time must be shorter. No money should be given to interviewed farmers, since this would monopolize the possibility of implementing surveys only for organizations with relatively high budgets.
10. A national survey should be administered by INE, with a decentralized structure, and independent fund handling for each of the regional offices.

Memorandum

DATE: March 11, 1994

TO: See Distribution

FROM: LAC/DPP/SDPP Jean Meadowcroft

SUBJECT: Project Evaluation Summary  
Country Bolivia  
Project National Household Survey

Attached for your information and files is a copy of the subject Project Evaluation Summary.

Distribution:

LAC Country Desk Officer: SEpstein  
LAC DR/Technical Division:WNilsestuen  
PPC/CDIE/DI Acquisitions: ALanghaug

BOLIVIA

UNITED STATES GOVERNMENT  
**memorandum**

**DATE:** December 29, 1993  
**REPLY TO** DP-374/93-M  
**ATTN OF:** AB  
Anne Beasley, Monitoring and Evaluation Specialist,  
Office of Development Programs  
**SUBJECT:** National Rural Household Survey Evaluation  
**TO:** Joseph Stepanek, Director, Office of Development Programs,  
AID/Washington

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Attached please find the Evaluation and Evaluation Summary for the National Rural Household Survey Project (511-0612).

Attachs. a/s

cc: POL/CDIE/DI (Copy of memo and PACR)  
LAC/SAM (Copy of memo and PACR)

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