Country Papers
Expert Meeting 2: Developing Sector Strategic Plans for Agricultural and Rural Statistics (SSPARS) and Integration into the National Strategies for Development of Statistics (NSDS)

Presented by: Mr. Savanh Hanephom,
Deputy DG of Department of Planning and Cooperation, MAF, LAO PDR

1. Background

1. Majority of the households in Lao PDR depend on agriculture and its related subsectors for their livelihood. Agriculture contributed about 30% of the country's GDP on average 2006-2010. About 75% of the population in Lao PDR lives in the rural areas. They are mainly engaged in agriculture and related activities. The most recent labor force and employment statistics (2005) indicate that agriculture is the biggest source of employment in Lao PDR, with about 80% of the workforce. These statistics, when compared with those from other developing countries in the region, suggest that Lao PDR's economy and population are much more dependent on agriculture. Also, it appears that the structure of the workforce has not changed significantly during the last two decades.

2. Although rural poverty has been reduced from 49% in 1992 to 32% when most recently measured in 2008, it still remains significantly higher than urban poverty (33% in 1992 and 18% in 2008). The much higher rural poverty incidence in the country and the fact that agriculture remains to be the main source of livelihood of majority of the population are compelling reasons for the government to focus on the development of the agriculture sector. Policies and strategies that foster rapid development in the sector deserve high priority in the Government's allocation of resources. As such, it is essential to study the vital role of agriculture in improving food security and reducing poverty particularly in the rural areas.

3. The Government of Lao PDR recognizes that good statistics are needed to effectively plan, monitor and evaluate progress in all sectors of society and the economy. A Statistics Law passed in 2010 is meant to lead to a rational and sustained development of the national statistical system. An Agricultural Census was conducted in 2010/2011 at great expense and effort by the Ministry of Agriculture and Forestry (MAF), in order to have reliable and up-to-date benchmark statistical information that would enable the crafting and implementing of evidence-based agricultural and rural development policies and programs. The agriculture census could also serve as frame for a comprehensive agricultural statistical data collection and information system.

4. Globally, the quality and quantity of agricultural and rural statistics have shown inexorable decline to alarming low levels in the past two decades. This was seen in international databases like FAO's and USDA's for example, and also in regional and national databases. To reverse this trend, the United Nations Statistical Commission endorsed in 2010 a Global Action Plan (GAP) to Improve Agricultural and Rural Statistics. In the Asia-Pacific region, a Steering Group for Agricultural Statistics (SGAS), which is comprised by 15 countries and seven development partners, including ADB, has drafted a Regional Action Plan (RAP) to support the Global Action Plan.

5. To support this regional effort, the Asian Development Bank (ADB) through a regional policy and advisory technical assistance 8029: Improving Agricultural and Rural Statistics for Food Security, is assisting five pilot countries including Lao PDR in developing their individual country action plans (CAP) for improving agricultural and rural statistics through intensive

consultation with major stakeholders. For Lao PDR this process was undertaken in Vientiane on 12-14 November 2012. ADB will also be supporting other stakeholders' consultations including a high level meeting to finalize this draft country action plan.

2.   Current Situation of Agricultural Statistics

The Stakeholders

6.   The major stakeholders of agricultural and rural statistics in Lao PDR can be classified into five groups – the Ministry of Agriculture and Forestry (MAF) as the primary data producer of agricultural and rural data, the Lao Statistics Bureau (LSB) that is the core agency of the national statistical system, data users that are either government agencies or the private sector, the development community (or international organizations) that supports the production of agricultural and rural statistics as well as use the available data for crafting programs and projects that they choose to support and the academia. The analysis of these five stakeholders groups is presented in Annex 2. It is to be noted that the MAF is also a major data user.

The National Statistical System

7.   The statistical system of Lao PDR is decentralized involving several institutions, each with its specific assignment. Until 2010, the Department of Statistics (DOS) under the Ministry of Planning and Investment (MPI) was responsible for population censuses and household surveys in the non-agriculture sector, notably the Lao Expenditure and Consumption Survey (LECS). The Statistics Law was enacted in June 2010 which upgraded DOS into the Lao Statistics Bureau (LSB), with status equivalent to a sub-ministry of a line ministry. The Statistics Law provides LSB the authority to conduct censuses and surveys, compile national accounts statistics and provide overall coordination of the system. It also specifies that the line ministries and province, municipality, district and sub-district offices can conduct sample surveys after receiving technical approval of LSB.

8.   The 2010 Statistics Law essentially divides the national statistical system (refer to Figure in Annex 3) into two subsystems: a 'vertical' subsystem composed mainly of LSB and a 'horizontal' subsystem composed of the line ministries' statistics units exemplified by MAF. To support the newly promulgated Statistics Law, a National Statistics Development Strategy that covers 2010-2020 was formulated with four strategic goals: 1) Improving Policy, Regulatory, and Institutional Framework; 2) Developing Statistical Infrastructure; 3) Data Development and Management and 4) Rationalizing Investment Infrastructure and Equipment. The requirements to fulfill these strategic goals (refer to Figure in Annex 4) is based on three groups of indicators: (1) economic (which includes agriculture), (2) social and (3) others (which includes environment).

Agricultural and Rural Statistics Compilation System

9.   As indicated in Annex 3, the line ministries are also covered by the Statistics Law, which gives them authority to produce and disseminate data for their respective sector in accordance with their mandate. The Department of Planning (DoP) of the Ministry of Agriculture and Forestry (MAF) has been assigned the coordination of statistical activities and compilation of data related to agriculture and livestock from various sources. Most statistical data cover planted area, production and yield of main crops, and number of livestock. The department also undertakes the collection of data on prices of agricultural commodities and of

inputs for agricultural production. It is also responsible for the cooperation and coordination with other relevant agencies over specific survey activities.

10.   The technical departments of MAF are responsible for the collection of data/information on the commodities, as mentioned above. The Department of Agriculture and Agricultural Extension collects and complies data on the crop situation and prepares monthly and seasonal reports on important economic crops based on information received from the provincial and district offices of the department. The Department of Forestry collects and compiles data related to forestry, quantitative exploitation and replanting of trees, source of water and national forestry resources. Similarly the Departments of Livestock and Fishery are responsible for statistics on their respective sub-sectors.

11.   The current agricultural statistics production system is based on administrative reporting. Each report is presented in the form of a general overview from the district to the provincial agriculture and forestry services of the concerned sector for study and analysis. The results of this analysis are forwarded by each province to the DoP of MAF. These provincial reports are the bases for the preparation by DoP of yearly bulletins on agriculture and forestry statistics. The statistics contained in these bulletins are divided into three main components – crop statistics, livestock statistics and price statistics. Thus, by and large, the annual national agricultural (including aquaculture, fishery and forestry) statistical database of Lao PDR remains heavily dependent upon an administrative reporting system.

12.   The first agricultural census in Lao PDR was conducted in 1998/1999. The second in 2010/2011 was implemented by an Agricultural Census Office (ACO) established in DoP and under the overall control of an Agriculture Census Steering Committee. LSB provided technical assistance. The census covered all 143 urban and rural districts in the country. Financial support for the census was received from a number of donors, including SDC, IFAD, AusAID, AFD and GIZ. The Government of Lao PDR also contributed its own funds while FAO provided technical support.

13.   The development of agricultural statistics system in Lao PDR has largely been driven by the availability of funds from the donor agencies, and is highly dependent on international support for completing their program of work. In the conduct of the Lao Census of Agriculture 2010/2011, there were difficulties in planning and implementing data collection because of delays in receiving funds.

Methodological and Technical Issues

14.   Based on current state of the NSS and historical developments in other similarly situated countries, medium to long-term evolutions of these subsystems would likely follow predicable patterns. On one side, sample surveys and censuses are much more expensive to do and sustain (than administrative reporting systems), and LSB continuous to be very much dependent on foreign donor assistance. Hence, LSB will be hard pressed to initiate more nation-wide data collection activities beyond LECS and the next population and housing census in 2015; new survey initiatives, if any, will more likely be pilots and/or very limited in scope and coverage. The agency will not have the resources to spare to be engaged in data collection in the agriculture sector. In fact, although the Statistics Law says LSB is responsible for censuses, the 2010/11 Census of Agriculture was done by MAF. Hence, LSB would gradually lose subject matter knowledge in agriculture, which, unfortunately, is a necessary condition for effective planning and implementation of surveys and censuses in the sector. Thus, as much as it may be unhappy with the quality of the administrative reporting system-

based data from MAF, LSB has no choice but to continue using these as inputs in, say GDP compilation.

15.   On the MAF side, the statistics production, as mentioned previously, is parceled out to the different technical departments; e.g. crops, livestock, and forestry statistics in the Departments of Agriculture, Livestock and Forestry respectively. Coordination of ctivtieis, consolidation and dissemination of results are done in the Center for Agricultural Statistics and Information, DoP. As already mentioned also, the method of data collection is through administrative reports which are filled at the village level and progressively summarized at district, province and national levels. This method is sustainable and has not needed much foreign assistance. However, the accuracy of its outputs are at times suspect or not trusted. The exceptions are the two agriculture censuses; the more recent 2010/11 Agriculture Census had a village component (complete enumeration), a long questionnaire for all households, and a short one for a nationwide sample of households. These gave MAF experience in organizing a nationwide operation that involved collecting data directly from households, processing and producing estimates and preparing reports out of them.

16.   To improve agricultural statistics, it is crucial to improve the administrative reporting systems, as well as supplement these with sample surveys – particularly agricultural or rural household surveys. An important first step towards improvement is to perform empirical comparisons between the output from the administrative reporting systems and the 2010/2011 agriculture census - for the same period and indicators across districts, provinces and the country. This would point to the large discrepancies and eventually to the causes of these discrepancies. The latter will likewise require documentation and comparative study of the methodologies used in both the administrative reporting system and the census.

17.   One major reason for doing a census is to have sampling frames for the inter-census sample surveys. This has not been done in Lao PDR to-date, since agricultural statistics have been sourced almost exclusively from administrative reports. A sampling frame may be viewed as a (complete) list of primary sampling units, such as villages, along with information on each required to group (stratify) and select a sample from them; that is, to design the inter-census sample surveys. As mentioned above, it is desirable to supplement administrative reporting systems with agricultural or rural household surveys in order to improve the country's national agricultural database.

Coordination, Data Compilation and Dissemination Issues

18.   Although coordination is mandated by law and is supposed to rest heavily upon LSB, currently coordination is hinges heavily on personal relationships. Data is communicated from one individual to another. In some cases, lack of coordination results in duplication of activities and discrepancies among data produced between agencies.

19.   Currently, the agricultural statistical system has financial and human resource shortages across the board. The human resource shortage is subject to the availability of financial resources. In addition to staff shortages, there is a clear need to increase the knowledge and skill of those involved in agricultural and rural statistics. Staff training is essential and is exacerbated by the lack of formal undergraduate and graduate statistics programs in the country.

20.   Staffs from line ministries such as the MAF receive very little international training, do not participate in staff exchanges, have limited opportunities for national trainings from LSB and are, in general, less fluent in English. At the provincial and local level, the statistical training opportunities are even more limited. The distance from LSB reduces the potential of conducting frequent statistical training and the use of English is also less.

21.   Knowledge transfer is not adequate and MAF does not have clear documentation system to ensure continuity of work in the event of staff turnover. The availability of international guidelines, handbook and manuals is constrained by the difficulty in translating documents into local language.

22.   MAF uses Excel as the primary compilation software and most of the data collected are manually entered. An integrated database management system for compilation, analysis and dissemination is not available. Poor internet connection especially in the provinces and districts also limits the potential for having an online data interface. In addition, other statistical infrastructure elements, such as a comprehensive data quality assurance framework and metadata compilation are lacking across the agricultural statistical system. Moreover, a mechanism for ensuring data quality does not exist. Most of the line ministries have internal procedures for reducing errors and editing data. However, MAF is lacking a policy or internal document on data editing and quality assessment.

23.   Data is disseminated by MAF through statistical reports and publications. A central data dissemination platform that provides users a mechanism for accessing agricultural and rural statistics data is not available. In addition, the ability to download data in a structured, user friendly format is not provided. Since little metadata is disseminated, users have no knowledge how these data were compiled.

3.   The Plan

24.   This plan was derived from the extensive discussions of stakeholders of agriculture and rural statistics. First, the minimum core set indicators was discussed by the stakeholders, on the basis of the recommended list from the Global Strategy. The resulting list of indicators is in Annex 5. This has yet to be fully discussed in a high-level meeting to get the commitment of government authorities. Discussion on the current situation followed during which the problem analysis and objective tree (Annex 6) were constructed. The results based monitoring framework that summarizes the plan is in Annex 7.

<u>Impact and Outcome</u>

25.   The intended impact of this plan is the formulation of better policies for improving food security, through the use of more and higher quality statistics. The expected outcome is the significant increase in the availability, quality, relevance and timeliness of a comprehensive set agriculture and rural statistics. Availability and timeliness mean the statistics are produced and made available in accordance with a mutually agreed release calendar; quality includes accuracy; and comprehensiveness and relevance have bearing on giving users the information they need, such as data that allow broader analysis of economic, social and environmental issues, as well as new data requirements that may emerge during the plan's implementation period.

Outputs

26.   The key outputs are:

1. Effective coordination mechanisms among agriculture and rural statistics stakeholders.
2. Uniform standards, concepts and methods on agricultural and rural statistics are developed and applied across all districts and government agencies
3. Adequate training programs are developed and implemented
4. Adequate number of trained staff on agricultural and rural statistics are hired
5. Adequate data collection equipment and support mechanisms are available
6. Data dissemination system is developed and applied
7. Good and appropriate data collection methods are adopted.

Key Activities

27.   Stakeholders at the November 12-14 workshop were emphatic in enjoining Lao Statistics Bureau (LSB) to strengthen its coordination of the whole national statistics system as mandated by the Statistics Law. The key coordination mechanism is a steering committee composed of representatives from relevant line ministries and other major stakeholders, which LSB should establish, draft its terms of reference, and activate as expeditiously as possible. The steering committee should be represented by high-level management from different ministries. Once established and functioning regularly, the steering committee can formulate policies and forge cooperation not only on agricultural and rural statistics but on all statistical areas. For agricultural and rural statistics, MAF should form another committee on statistical standards and methods, represented by expert technical staff from various MAF divisions and ministries involved in this area. This MAF-based committee will oversee the development of a handbook or manual on definitions, concepts and methods that are used for the collection and compilation of agricultural and rural statistics. This handbook can be the basis for training and should be enforced in all data collection and, whether administrative reports or surveys, for agricultural and rural statistics. The committee should monitor compliance with the handbook.

28.   Training programs, both short and long-term, on the basis of requirements defined by the needs assessment study should be developed and conducted regularly. If needed in the short-term, MAF will seek external assistance for specific programs (e.g. food balance sheet, analysis of survey data, planning of surveys, conduct of surveys and census methods). Regular training programs for existing staff should be offered to upgrade their skills. There must also be a plan to assist them to pursue relevant higher degree programs while working.

29.   The organization plan of relevant MAF departments/divisions have to be reviewed so that adequate number staff on agricultural and rural statistics can be identified and the actual responsibilities of staffs doing statistics work can be reflected in their official job descriptions. Changes in workloads called for by this Country Assistance Plan may lead to some realignment of the statistics personnel allocations among the MAF divisions. Request for additional staff to the Ministry of Home Affairs, if any, should be done by MAF after the review.

30.   Provision for improvement of IT facilities (such as high-speed computers and internet connectivity) and training of data managers in the districts and provinces would immensely help improve quantity, quality and timeliness of the agriculture and rural indicators. A review of available IT and other data collection equipment should be conducted and after which, the

number of additional equipment, if any, should be determined on the basis of data collection and processing requirements. MAF should propose and seek a budget for additional equipment needed, if any, from the Ministry of Finance (with endorsement from the Ministry of Planning and Investment) or from donors as last resort. There should also be a regular maintenance program for existing equipment. Training on how to operate and use IT equipment should also be given to staff.

31.   In order to improve the collection and analytical methods for agriculture and rural data, the documentation of current methods will be first undertaken. Detailed, comprehensive documentations of the concepts and definitions, methods, sampling procedures, field operations and data capture methods used in the 2010/2011 agriculture census, crop-cutting and other recent sample surveys and the administrative reporting systems of MAF will be high priority activities.

32.   An efficient and user-friendly dissemination system that could raise public awareness and appreciation of agriculture and rural statistics will be developed. The Committee on Standards (output 2) will also be requested to advice on the dissemination system. The Center for Statistics and Information will spearhead the development of the integrated dissemination plan with the help of a technical expert. Tools that should be considered are websites, online database and other IT platforms. A successful dissemination tool that can be considered is CountryStat a software application introduced to the Philippines and Bhutan by the Food and Agricultural Organization. CountryStat disseminates agricultural statistics and meta data as well as provide users analytical interfaces. The handbook on concepts, definitions and methods that will be developed can also be published in the CountryStat website; and similarly for the results of the methodological researches that may be conducted.

33.   The CountryStat or similar website will also be a good tool for raising public awareness and appreciation of agriculture and rural statistics. With increasing public awareness and appreciation, support for agriculture statistics will spread and consequently influence the allocation of more resources for agriculture and rural statistics. Other forms of advocacy will be press releases on important agriculture and rural statistical products including key research findings, and organizing activities for the general public during MAF and LSB public events.

34.   Longer-term, good and appropriate data collection methods should be adopted and institutionalized so that timely and reliable statistics can be generated. As a starting point and in line with the work of the Committee on Standards (Output 2), all existing data collection methods for agricultural and rural statistics should be documented. Assessment of the accuracy of the official agricultural and rural statistics, especially production and area of the major crops, should also be conducted. This can be done by comparing the census results with the administrative reporting system statistics and for some years and common data items, from the Lao Expenditure and Consumption Survey (LECS). A technical expert can be engaged to help CSI undertake the comparative analysis and train CSI staff in the analysis and management of large data files.

35.   There should be coordination between LSB and MAF in identifying good and appropriate methods for data collection. External technical advice on the use of the methods, and perhaps, also in identifying the appropriate methods can be sought so that LSB and MAF can make informed decisions. A good candidate for external technical advice will be the National University of Lao. MAF and LSB should also review and decide together on the steps that will be taken for institutionalization of the selected methods. The staff capacity for applying the selected data collection methods must be improved through regular training programs.

4. Work plan and Schedule (to be reviewed and finalized during high level meeting. End year may not be 2018 – it should coincide with the end year of government plan)

Activity	2013				2014				2015				2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Effective coordination mechanisms are implemented																								
Establish a steering committee for coordinating all statistical activities	■	■	■																					
Assist other agencies in developing coordination structures	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Develop and implement some technical cooperation with Neighboring countries	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2. Uniform standards, concepts are developed and applied across all districts and agencies																								
Form a committee represented by all agencies to agree on standards concepts and methods that will be used. Technical expert may be needed to advise the committee.	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Develop manuals and handbooks for training all agricultural and rural statistics staff in relevant agencies on the use of the standards, concepts, and methods	■	■	■																					
Schedule regular training program based on the handbooks.					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
A committee should enforce correct use of handbooks and manuals.					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3. Adequate training programs are developed and implemented																								
Develop a training plan (includes needs assessment, list of priority topics/programs, set schedule and responsibilities , identify resource persons).	■	■																						
Request Government for budget Allocation.			■				■																	
Seek external support for budgetary gaps.			■	■	■	■	■	■	■	■														
4. Adequate number of trained staff are hired																								
Review the current staff allocation for agricultural and rural statistics so that the number of additional staff needed can be determined.	■	■																						
Request for additional staff for agricultural and rural statistics assigned in different MAF divisions from the Ministry of Home Affairs			■	■																				
Conduct regular training program For existing staff.						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Develop a plan to assist regular staff obtain relevant higher degree program while working.									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5. Adequate data collection equipment and support mechanisms are available																								
Review the available IT equipment (software, hardware, network system, etc.) and other data collection equipment and determine																								

Activity	2013				2014				2015				2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
how many additional items are needed based on data collection requirements.	█	█																						
Propose and seek budget for additional equipment needed, if any, from the Ministry of Finance or from donors (last resort).			█	█																				
Repair, maintain, and upgrade equipment	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Conduct regular training programs on operating IT equipment.					█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
6. Dissemination system is developed and applied																								
Committee on Standards (Output 2) will also be asked to advise on the Dissemination system.	█																							
Develop an integrated dissemination plan with the help of a technical expert. New and appropriate IT platforms should be considered.		█	█																					
Apply the intetegrated dissemination plan.					█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
7. Good and appropriate data collection methods are adopted																								
LSB will assist MAF in identifying good and appropriate methods For data collection.	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Seek technical advice in the use of methods and perhaps, in identifying the methods that are appropriate.	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
MAF and LSB will review and decide together on the steps that will be undertaken for Institutionalization of selected methods.	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Build staff capacity from central office to district level in adopting the selected methods.					█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

5.   Implementation Arrangements (this should be further elaborated after the high level consultation meeting)

36.   MAF will take the lead in the implementation of this action plan. Since the coordination of all statistical activities is vital to achieving timely and reliable agriculture and rural statistics, LSB through the steering committee for statistical coordination will ensure that there is effective coordination, cooperation and collaboration among line agencies. Moreover, MAF, through the committee on standards, should ensure that there is consistency in the application of concepts, definition and methods for compiling agricultural and rural statistics. The LSB-based Steering Committee for coordination of all statistical activities should be informed about the activities of the MAF-based committee on standards.

37.   This action plan will be implemented immediately until 2020, when the 11th government plan is completed. Financing requirements of this plan will be sourced from the government. However, when financing gap is deemed critical by MAF for achieving the outputs, external assistance will be sought; and similarly for technical inputs that are not available in Lao PDR.
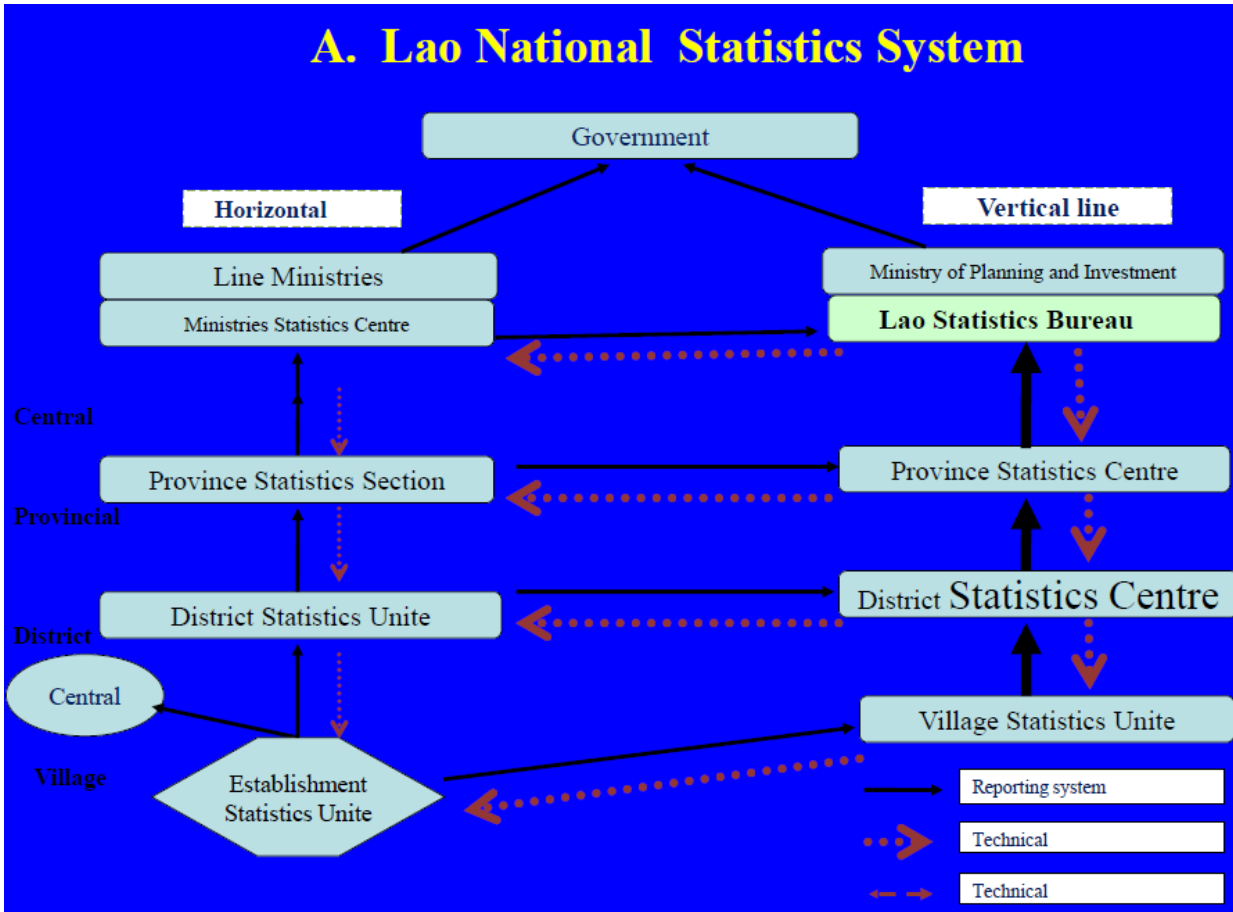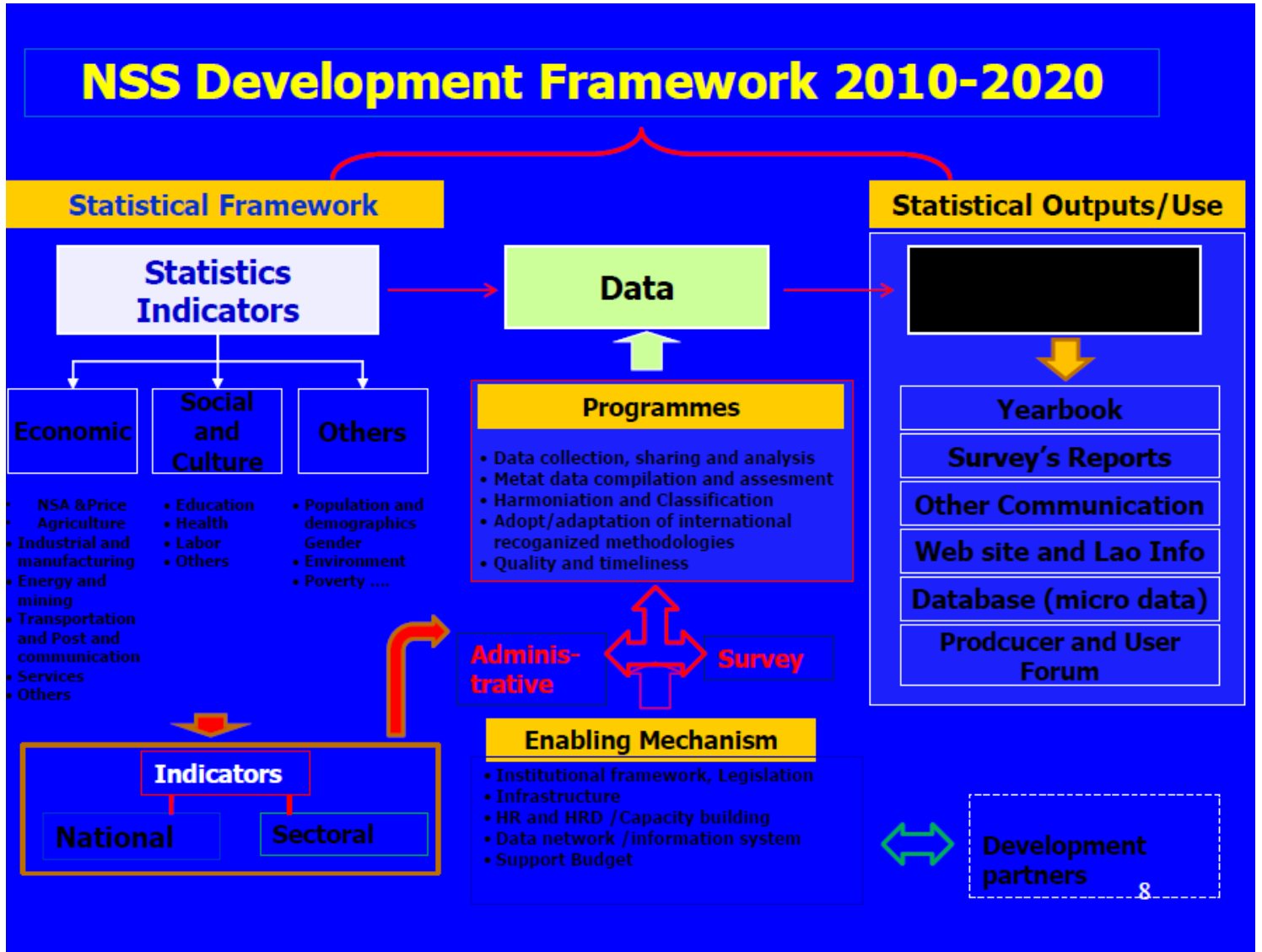
Annex 2
LAO PDR: STAKEHOLDERS' ANALYSIS FOR IMPROVING AGRICULTURAL AND RURAL STATISTICS

Stakeholder	Interest	Perception of problem	Resources	Mandate
Lao Statistics Bureau	Timely and reliable data; good methods; access to training program	Inadequate technical staff; no regular training program; inadequate staff support for coordination;	Limited technical experience; limited budget for training; reference manuals; authority from the Statistics Law	Core agency of Lao's Statistical System;
Ministry of Agriculture	Timely and reliable data; good data collection methods; data dissemination tools	data collection not timely and is not standardized across regions; no data checks on data collected; inadequate collaboration with LSB; insufficient number of technical staff; inadequate budget for data collection	Technical knowledge; staff's cooperation and support; government support	Provide data to policy makers and other users
Data users from the private sector, NGOs,	Data for marketing, business planning, production,	Data quality suspect; Timeliness of data; Problem of data sources; inconsistency	Political support and advocacy	Use of data and provision of information to MAF and LSB
International organizations	Data for planning, resource allocation	Data quality suspect; timeliness of data; Problem of data sources; inconsistency of data	Finances to support government budgetary gaps; technical knowledge	Assist countries to improve quality of their people's lives
Academia	Data and methods for research; development of good training courses, including degree courses in agricultural statistics	Insufficient interaction with the Lao statistical system; inadequate number of trained teachers; lack of support from government	Knowledge of statistics and methods; teaching infrastructure; interested teachers	Teaching, including development the teaching materials; Research and training

The Lao National Statistical System

A. Lao National Statistics System

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                              │    Government    │
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      │  Horizontal  │                                    │ Vertical line│
      └──────────────┘                                    └──────────────┘

      ┌──────────────────────┐              ┌──────────────────────────────────┐
      │    Line Ministries   │              │ Ministry of Planning and Investment│
      ├──────────────────────┤              ├──────────────────────────────────┤
      │Ministries Statistics │              │      Lao Statistics Bureau       │
      │        Centre        │              └──────────────────────────────────┘
      └──────────────────────┘

Central

      ┌──────────────────────────┐          ┌──────────────────────────────┐
      │ Province Statistics Section│        │   Province Statistics Centre  │
      └──────────────────────────┘          └──────────────────────────────┘
Provincial

      ┌──────────────────────────┐          ┌──────────────────────────────┐
      │  District Statistics Unite│         │  District Statistics Centre   │
      └──────────────────────────┘          └──────────────────────────────┘
District
      ┌─────────┐
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      ┌──────────────────┐                  │    Village Statistics Unite   │
      │   Establishment  │                  └──────────────────────────────┘
Village│ Statistics Unite │
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→	Reporting system
·· ▷	Technical
←- -→	Technical

The Lao PDR National Statistical System Development Framework 2010-2020

LAO PDR: Minimum Core Set of Agricultural and Rural Statistics (For Further Discussion)

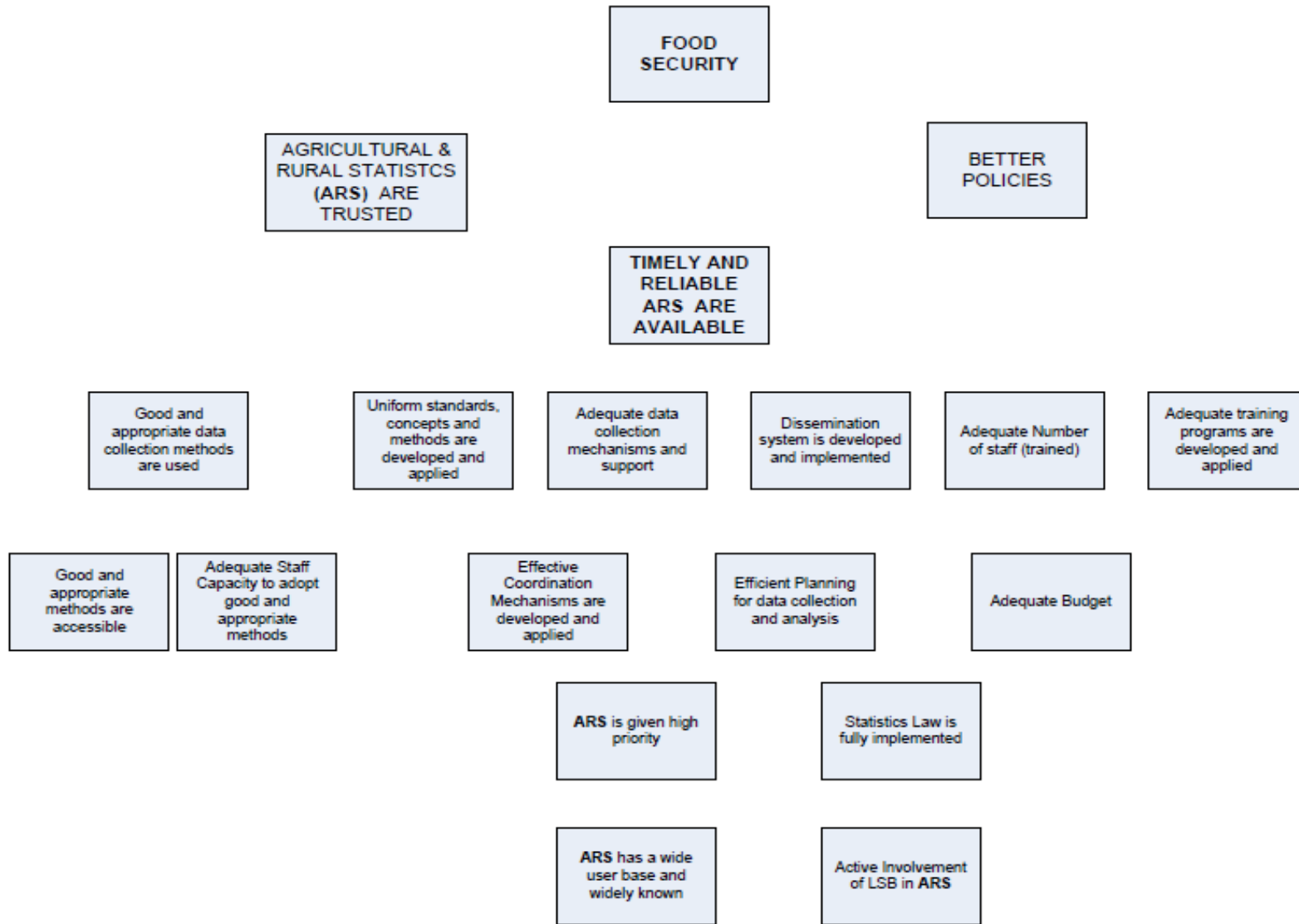| Group	Key Indicators	Core Data Items	Frequency	Sources of Data	Responsible Agency
Economic					
Production	Crop				
	Crop production: quantity	rice, maize, starchy roots, vegetable and bean, peanut, soybean, mungbean, tobacco, cotton, sugarcane, coffee, and tea(mango, coconut, banana, jackfruit, tamarind..)	Twice a year	Reporting System and Survey	DOA, MAF
	Crop production: value		Twice a year	Reporting System and Survey	DOA, MAF
	Crop yield per area		Twice a year	Reporting System and Survey	DOA, MAF
	Area planted		Twice a year	Reporting System and Survey	DOA, MAF
	Area harvested		Twice a year	Reporting System and Survey	DOA, MAF
	Livestock				
	Livestock production: quantity	number of head of buffaloes, cattles, pigs, goats and sheeps and poultry	Annual	administrative records	DLF, MAF
	Livestock production: value		Annual	administrative records	DLF, MAF
	Fishery				DLF, MAF
	Fishery and aquaculture production: quantity	volume and value of fishery and aquaculture production	Annual	administrative records	DLF, MAF
	Fishery and aquaculture production: value		Annual	administrative records	DLF, MAF
	Forestry				
	Forest production of wood: quantity	Number of trees, timber, lumber, plywood…	Annual	administrative records	DOF, MAF
	Forest production of wood: value		Annual	administrative records	DOF, MAF
	Forest production of non wood: quantity		Annual	administrative records	DOF, MAF
	Forest production of non wood: value		Annual	administrative records	DOF, MAF
External Trade	Export: quantity	export volume and value of wood products and coffee, Buffalo, Cattle	Annual	administrative records	MOIC, MAF
	Export: value		Annual	administrative records	MOIC, MAF
	Import: quantity	import volume and value of sugar, milk and long grain rice, Animal Product	Annual	administrative records	MOIC, MAF
	Import: value		Annual	administrative records	MOIC, MAF

Group	Key Indicators	Core Data Items	Frequency	Sources of Data	Responsible Agency
				Economic	
Stock of Capital and Resources	Livestock inventories		Annual	administrative records	MOIC, MAF
	Agricultural machinery		Annual	administrative records	MOIC, MAF
	Stocks of main crops: quantity		Annual	administrative records	MOIC, MAF
	Land and use		Annual	administrative records	DOL, MAF
	Water related		Annual	administrative records	DOI, MAF
	- Irrigated areas	Water Suply	Annual	administrative records	DOI, MAF
	- Types of irrigation		Annual	administrative records	DOI, MAF
	- Irrigated crops		Annual	administrative records	DOI, MAF
	- Quantity of water used		Annual	administrative records	DOI, MAF
	- Water quality		Annual	administrative records	DOI, MAF
Inputs	Fertilizer quantity				DOA, MAF
	Fertilizer value				
	Pesticide quantity				DOA, MAF
	Pesticide value				
	Seeds quantity				DOA, MAF
	Seeds value				
	Animal Feed quantity				
	Animal Feed value				
	Forage quantity				
	Forage value				
	Animal vaccines and drugs quantity				
	Animal vaccines and drugs value				
	Aquatic seeds quantity				
	Aquatic seeds value				
Agro-Processing	Main crops				DOA, MAF
	Post harvest losses				DOA, MAF
	Main livestock				

Group	Key Indicators	Core Data Items	Frequency	Sources of Data	Responsible Agency
Economic					
	Fish: quantity				
	Fish: value				
Prices	Producers prices	Prices of rice, maize, starchy roots, vegetable and bean, peanut, soybean, mungbean, tobacco, cotton, sugarcane, coffee, and tea	Quarterly		DOA, MAF
	Wholesale prices				
	Consumer prices		Quarterly		LSB
	Agric. Input prices				
	Agric. Export prices				
	Agric. Import prices				
Investment Subsidies or Taxes	Public investment in agriculture				
	Agricultural subsidies				
	Fishery access fees				
	Public expenditure for fishery management				
	Fishery subsidies				
	Water pricing				
Rural Infrastructures and Services	Area equipped for irrigation				
	Crop markets				DOA, MAF
	Livestock markets				
	Rural roads (Km)				
	Railways (Km)				
	Communication				
	Banking and insurance				
Social					
Demographics of urban and rural population	Population dependent on agriculture				
	Agricultural workforce (by gender)				
	Fishery workforce (by gender)				
	Aquaculture workforce (by gender)				

Group	Key Indicators	Core Data Items	Frequency	Sources of Data	Responsible Agency
Economic					
	Household income				
Environmental					
	Soil degradation				
	Water pollution due to agriculture				
	Emissions due to agriculture				
	Water pollution due to aquaculture				
	Emissions due to aquaculture				
Geographic Location					
	Geo-coordinate of the statistical unit (parcel, province, region, country)				

LAO PDR: IMPROVING AGRICULTURAL AND RURAL STATISTICS – OBJECTIVE TREE

FOOD SECURITY

AGRICULTURAL & RURAL STATISTCS (ARS) ARE TRUSTED

BETTER POLICIES

TIMELY AND RELIABLE ARS ARE AVAILABLE

Good and appropriate data collection methods are used

Uniform standards, concepts and methods are developed and applied

Adequate data collection mechanisms and support

Dissemination system is developed and implemented

Adequate Number of staff (trained)

Adequate training programs are developed and applied

Good and appropriate methods are accessible

Adequate Staff Capacity to adopt good and appropriate methods

Effective Coordination Mechanisms are developed and applied

Efficient Planning for data collection and analysis

Adequate Budget

ARS is given high priority

Statistics Law is fully implemented

ARS has a wide user base and widely known

Active Involvement of LSB in ARS

**LAO PDR: IMPROVING AGRICULTURAL AND RURAL STATISTICS FOR FOOD SECURITY
DESIGN AND MONITORING FRAMEWORK**

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Better policies for food security	Food security targets in the ___ plan are met/ food insecure and rural poor statistics show improving trend	MAF reports; Government annual plans and performance reports	A: Agricultural and rural statistics will be used for policy making
Outcome Timely and reliable agricultural and rural statistics are available	Minimum core set of indicators (as agreed) are produced regularly and released on schedule	Center for Statistics, MAF and LSB websites	A: Government's commitment to support country action plan
Outputs			
Effective coordination mechanisms implemented	Steering Committee (SC) for statistical coordination established/ Number of meetings per year of SC	Lao Statistics Bureau (LSB) reports and website	A: LSB's leadership and commitment to uphold the Statistics Law
Uniform standards, concepts and methods for agricultural and rural statistics are developed and applied across all districts and agencies	Handbook on agricultural statistics concepts and methods produced and published online	Center for Statistics, MAF website	A: Cooperation of all concerned line ministries
Adequate training programs are developed and given to current and new MAF staff	Number of training programs conducted annually	Center for Statistics, MAF report	A: Government's support
Adequate number of trained MAF Statistics staff	Number of trained technical staff	Center for Statistics, MAF report	A: Government's support
Adequate data collection equipment and support mechanisms are available	Equipment requirement procured	Department of Planning, MAF report	A: Government's support
Dissemination system is developed and applied	Dissemination Standards and facility available online	Center for Statistics, MAF website	A: Availability of external technical support

Good and appropriate data collection methods are adopted.	MAF develops and deploys appropriate combination of administrative reporting system and sample surveys	Center for Statistics, MAF website	A: Availability of technical advice; Increased number and capability of MAF statistics cadre

Activities and Milestones

Output	Activities	Responsibility	Time Line
Effective coordination mechanisms implemented	Establish a steering committee responsible for coordinating statistical activities in whole Lao Statistical System – based on the Statistics Law	LSB	2013
	LSB assists other agencies in developing coordination structures and in acquiring technical knowledge to support data collection activities – based on Statistics Law	LSB	2013 onwards
	Develop and implement some technical cooperation with neighboring countries.	MAF, LSB	2013 onwards
Uniform standards, concepts and methods are developed and applied across all districts and agencies	Form a committee represented by all agencies involved to agree on standards, concepts and methods that will be used. Technical expert may be needed to advise the committee.	Statistics Center, MAF; All line ministries and agencies concerned	Q1 2013
	Develop training manuals and handbooks agriculture and rural statistics staff in all relevant agencies on the use of the standards, concepts and methods.	Statistics Center, MAF	January - December 2013
	Schedule regular training program	Statistics Center MAF	2014 onwards
	Committee formed to monitor adoption of recommended standards, concepts and methods	Statistics Center, MAF; All line ministries and agencies concerned	2014 onwards

Adequate training programs are developed and implemented	Develop a training plan for agricultural and rural statistics improvement (includes needs assessment, list of priority topics/programs, set schedule and responsibilities, identify resource persons)	Statistics Center, MAF and LSB	January – June 2013
	Request government for budget appropriation	MAF to forward to MPI to MOF	July 2013
	Seek external support for budgetary gaps	MAF and other int'l orgs	July 2013
Adequate number of trained staff	Review the current staff allocation and conduct needs assessment study, to determine number of new staff required.	Statistics Center, DOPC, MAF and all MAF divisions	January-June 2013
	Request Ministry of Home Affairs for additional staff for agricultural and rural statistics.	MAF	July 2013
	Conduct regular training programs on agriculture and rural statistics for existing and incoming staff	Statistics Center, MAF and LSB	Mid 2014 - 2020
	Develop a plan to assist regular staff obtain on-the-job relevant higher degree programs.	Statistics Center, DOPC, MAF and LSB	Mid 2015-2020
Adequate data collection equipment and support mechanisms are available	Review the available IT equipment (software, hardware, network system…) and other data collection equipment and determine how many additional items are needed based on data collection requirements.	Statistic Center(MAF); respective agencies involved.	Q1 2013
	Propose and seek budget for additional equipment needed, if any, from Ministry of Finance or from donors (last resort).	MAF to MPI and to MOF	Q2 2013
	Repair, maintain and upgrade equipment	Statistic Center(MAF); respective agencies involved	Continuous

	Training on how to operate and use IT equipment	Statistic Center or Consultant	Twice a year beginning 2014
Dissemination system is developed and applied	Request Committee on standards, concepts and methods to advice on the dissemination system.	Statistics Center, MAF; All line ministries and agencies concerned.	Q1 2013
	Develop an integrated dissemination plan, with the help of technical expert. Tools that should be considered are websites, online database, brochure and other hard copy publication and IT tools.	Statistics Center, MAF; All line ministries and agencies concerned	Q2-Q3 2013
	Implement integrated dissemination plan.	Statistics Center, MAF; All line ministries and agencies concerned	Q4 2013 onwards
Good and appropriate data collection methods are adopted	MAF and LSB collaborate in identifying good and appropriate methods for data collection.	MAF and LSB with National University of Lao PDR	January 2013 onwards
	Seek technical advice in choice and use of methods.		January 2013 onwards
	MAF and LSB work jointly for adoption and institutionalization of the selected methods.	MAF, LSB and NUL	March 2013 onwards
	Build staff capacity from central office to district level in adopting the selected methods.	MAF, LSB and NUL	2014 onwards