

THE UNITED REPUBLIC OF TANZANIA



**AGRICULTURAL SECTOR DEVELOPMENT PROGRAMME
(ASDP)**

MONITORING AND EVALUATION FRAMEWORK

Revised Final Draft

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ASDP M&E Thematic Working Group

ASDP Monitoring and Evaluation Framework

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Acronyms

ASDP	Agricultural Sector Development Programme
ASDS	Agricultural Sector Development Strategy
ASLMs	Agricultural Sector Lead Ministries
A-WG	Agricultural Working Group of Development Partners
BF-SC	Basket Fund Steering Committee
DADP	District Agricultural Development Plan
DALDO	District Agricultural and Livestock Development Officer
DED	District Executive Director
DFT	District Facilitation Team
DPP	Director of Policy and Planning
DPs	Development Partners
DSC	Director of Sector Coordination
FAO	Food and Agricultural Organization
GoT	Government of Tanzania
JICA	Japan International Cooperation Agency
LGAs	Local Government Authorities
LGDG	Local Government Development Grant
LGMD	Local Government Monitoring Database
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MIT	Ministry of Industry and Trade
MLFD	Ministry of Livestock and Fisheries Development
M&E	Monitoring and Evaluation
MIS	Management Information System
MTEF	Medium-Term Expenditure Framework
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umasikini Tanzania
NBS	National Bureau of Statistics
NSGRP	National Strategy for Growth and Reduction of Poverty
PAF	Performance Assessment Framework
PMO-RALG	Prime Minister's Office- Regional Administration and Local Government
PS	Permanent Secretary
RAS	Regional Administrative Secretary
RAA	Regional Agricultural Adviser
RDS	Routine Data System
RLA	Regional Livestock Adviser
RS	Regional Secretariat
RTA	Regional Trade Adviser
SWAp	Sector Wide Approach
TANGO	Tanzania Non-Governmental Organizations
TWG	Thematic Working Group
URT	United Republic of Tanzania
VAEO	Village Agricultural Extension Officer
VEO	Village Executive Officer
WAEO	Ward Agricultural Extension Officer
WEO	Ward Executive Officer
WFT	Ward Facilitation Team

ASDP Monitoring and Evaluation Framework

1. INTRODUCTION

1.1 Background

The Government of Tanzania has adopted the Agricultural Sector Development Strategy (ASDS) since 2001. The objective of the ASDS is to achieve a sustained agricultural growth rate of 5 to 6 percent per annum primarily through the transformation from subsistence to commercial agriculture. The Agricultural Sector Development Program (ASDP), developed in 2003, is a long-term process designed to implement the ASDS based on a Sector Wide Approach (SWAp). It establishes operational linkages between the Agricultural Sector Lead Ministries (ASLMs)¹ and other stakeholders. It forges the connection between demand-driven, field-based district planning processes, and the mobilization and monitoring of national and international investment in agriculture. With the launching of the ASDP, there is a growing interest in establishing a sector-wide monitoring and evaluation (M&E) system.

In September 2007, the first ASDP M&E framework which outlines how the M&E for the agricultural sector under the ASDP is conducted was developed and approved by the Committee of ASLMs Directors. The framework was developed by the ASDP M&E Thematic Working Group (TWG) which is composed of the officials of both the Government of Tanzania and Development Partners (DPs). As for the former, M&E specialists, Management Information System (MIS) experts and statisticians were appointed to be members of the TWG. Among the DPs who participated in the Working Group are FAO, Irish Aid, JICA, and World Bank. In developing the M&E framework, a lot of consultations were made with officials of Local Government Authority (LGA) and Regional Secretariats (RSs). Subsequently, the ASDP M&E Guideline which delineates actions to be taken by each stakeholder for ASDP M&E has been developed and approved by the Committee of ASLMs Directors. Both the framework and guideline have been disseminated to all the regions / districts.

It is now three years since the first M&E framework was adopted; it is high time to revise the framework to adjust to the implementation made in the ASDP since then. The revised M&E framework incorporates, among others, new short-listed indicators and improvement in the Agricultural Routine Data System. It also explains an envisaged M&E system of the ASDP. Some of them have already been implemented. Others are not in place yet, and the M&E TWG is currently working toward full operationalization of the framework.

1.2 Objectives

The overall objective of the M&E framework is to outline the M&E system for the agricultural sector under the ASDP. The M&E system will provide information that will enable stakeholders to track progress and enhance informed decision-making at all levels in the implementation of the ASDP.

The specific objectives of the ASDP M&E system are to:

- Promote the importance of systematic data/information collection and utilization of M&E results in the planning of the ASDP;
- Strengthen the M&E capacity of ASDP stakeholders to collect, analyze and use data/information; and
- Enhance the understanding of trends and changes in the levels of agricultural development, food security, and poverty reduction in the country over time.

¹ The ASLMs are the Ministry of Agriculture, Food Security and Cooperatives (MAFC), Ministry of Livestock and Fisheries Development (MLFD), Ministry of Industry and Trade (MIT) and Prime-Minister's Office - Regional Administration and Local Government (PMO-RALG).

1.3 Guiding Principles

The ASDP M&E will be undertaken under the following guiding principles.

- Harmonized with other government M&E systems, such as MKUKUTA II.
- Results-based management adopted.
- Existing mechanisms of data collection used.
- Using the baseline data / information as benchmark
- Ad-hoc surveys avoided as much as possible.
- Starting as simple as possible.
- Starting from the current situation.
- Incremental in capacity development.
- Recognizing the dynamic nature of the ASDP.
- Flexible in revising ASDP M&E framework.

1.4 Scope of the M&E Framework²

The M&E framework covers the following scopes.

- Performance measurement of the ASDP
- Data collection, reporting and reviews
- Institutional arrangements for ASDP M&E.

² M&E undertaken for each project in District Agricultural Development Plans (DADP) is not presented in this document.

2. PERFORMANCE MEASUREMENT OF THE ASDP

2.1 Overall framework

A part of the progress and development of ASDP is monitored and evaluated through indicators. The indicators are developed at both national and district levels. Figure 2.1 shows the relationship between the indicators for ASDP and DADP.

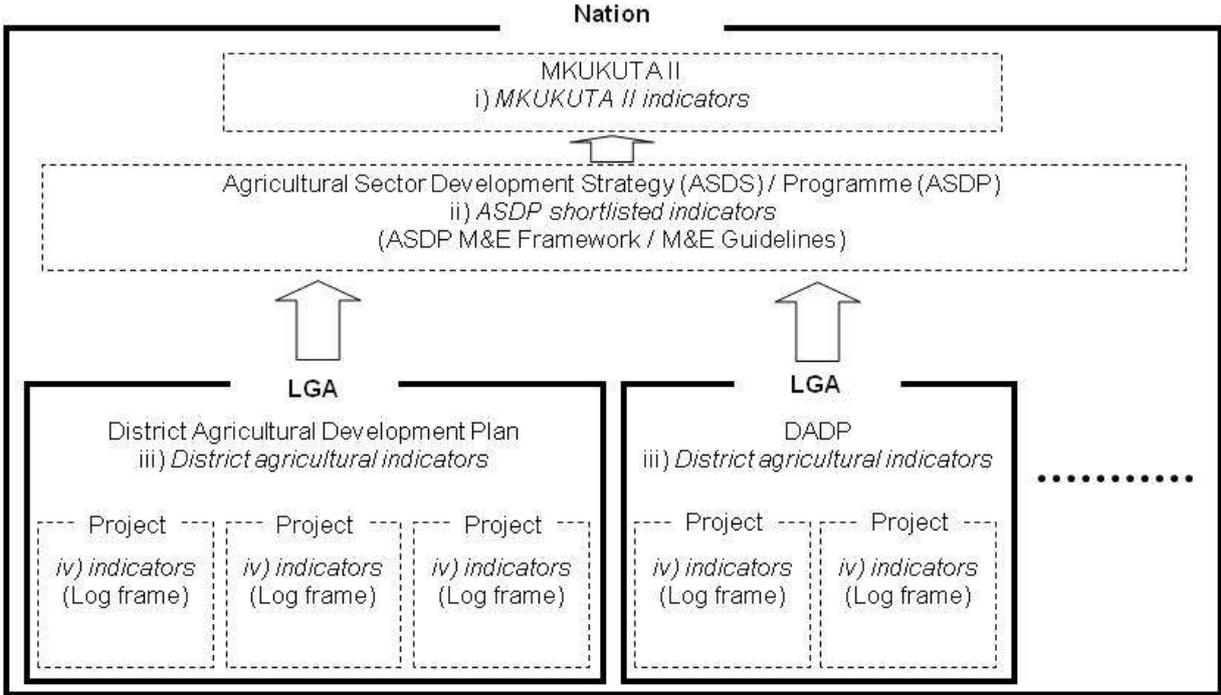


Figure 2.1 Four levels of indicators concerning ASDP/DADP

As shown in Figure 2.1, there are four levels of indicators. The first are the MKUKUTA II indicators. They have been already developed, and the attainment of MKUKUTA II goals is monitored and evaluated in light of these indicators. The second are the ASDP shortlisted indicators, which are explained in the next section. The national level progress of ASDP is measured through these indicators. The third are the district agricultural indicators. Each LGA may develop its own indicators in reference to its own agricultural development goals. But ASDP indicators should also be taken into account to ensure that the goal of agricultural development in each LGA is consistent with that of the nation. The fourth are those for each DADP project (activity / intervention). These indicators are developed when a log-frame for each project is prepared as explained in the DADP guidelines (Quick Guides). The third and fourth level indicators are explained in Section 2.3 and 2.4, respectively.

2.2 ASDP shortlisted indicators

In developing ASDP indicators, the outcome statements were first defined in referring to the strategic areas of the ASDP/ASDS. These outcome statements and strategic areas are shown in Figure 2.2. There are several steps between these outcome statements and the overall goals of the ASDP/ASDS. These steps are translated into (higher level) outcome statements, which correspond to the purpose and strategic objectives of the ASDS. For each of these outcome statements, output statements were also developed referring to ASDP/ASDS interventions. The linkages between the impact, outcome and output statements and their relationship with ASDP/ASDS are depicted in Figure 2.3.

ASDP indicators were developed with respect to each impact, outcome and output statement. In doing so, references were made to the indicators proposed by each ASLM and those stated in the documents concerning the ASDP (URT 2006c; URT 2003; and URT 2001). Relevant MKUKUTA indicators were

also selected. These formed the long-listed indicators as shown in Annex 1.

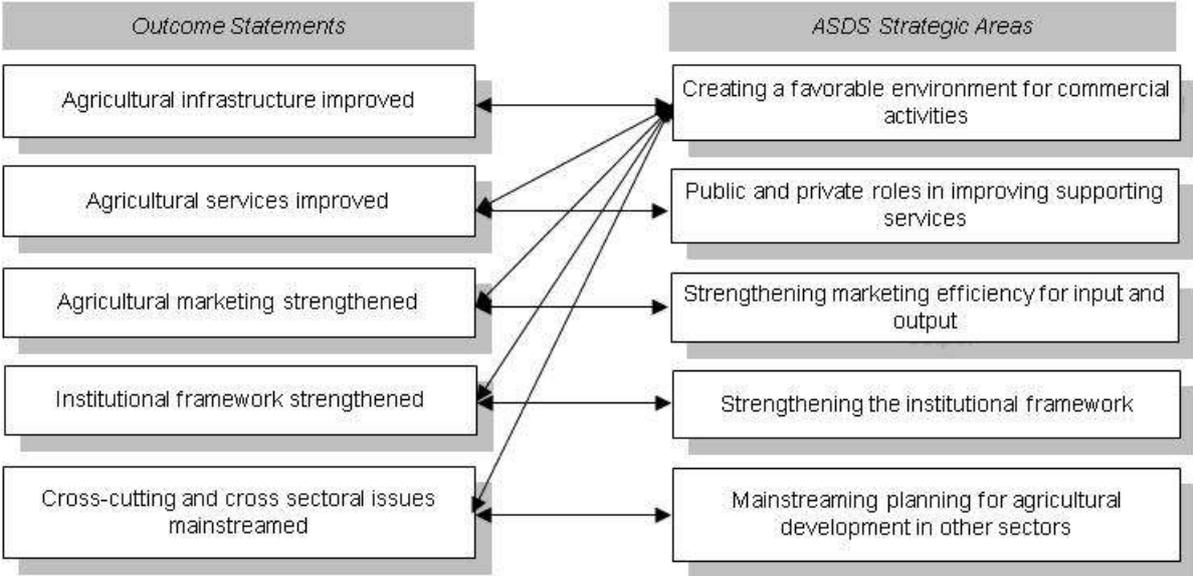


Figure 2.2 Relationship between outcome statements and ASDS strategic areas

The short-listed indicators were selected from the long-listed indicators, using the SMARTU criteria (Specific, Measurable, Accurate, Realistic, Timely and Useful) to make the number of indicators feasible in the short run. The short-listed indicators and their definitions are shown in Annex 2.

The shortlisted indicators have been modified to incorporate the changes in the ASDP priorities, the availability of new data and introduction of new sample surveys. Table 2.1 shows the latest list of the ASDP shortlisted indicators. The ASDP M&E TWG will review the indicators routinely so that the performance of ASDP is assessed accordingly.

The data for the ASDP shortlisted indicators are collected from a variety of sources, using the methods explained in the next section. The data on each indicator are collected, analyzed and summarized in the ASDP M&E Progress Report.

Input and process indicators were also developed for each strategic area of the ASDP/ASDS. However, they were not short-listed as the framework is result-oriented.

Disaggregation of information by particular groups (gender, disabled persons, youth and others) shall be accommodated basing on the user needs.

2.3 District agricultural indicators

It is suggested that each LGA develop district agricultural indicators to monitor and evaluate the progress of DADP. The indicators should reflect the district’s agricultural policies and strategies as specified in the strategic plan and align with national level indicators. In MTEF system, districts are supposed to set indicators on sector basis in order to measure the achievement of the district objectives. The district agricultural indicators are referred to as those selected from the agricultural sector. It is important to start with minimum number of indicators to make the data collection and analysis feasible.

2.4 Project indicators

In addition to district agricultural indicators, it is suggested that LGAs develop indicators for each DADP project (intervention) and present them in a log-frame for each project. These indicators are used to monitor and evaluate the progress of each project. For more details of the log-frame, please refer to the DADP guidelines.

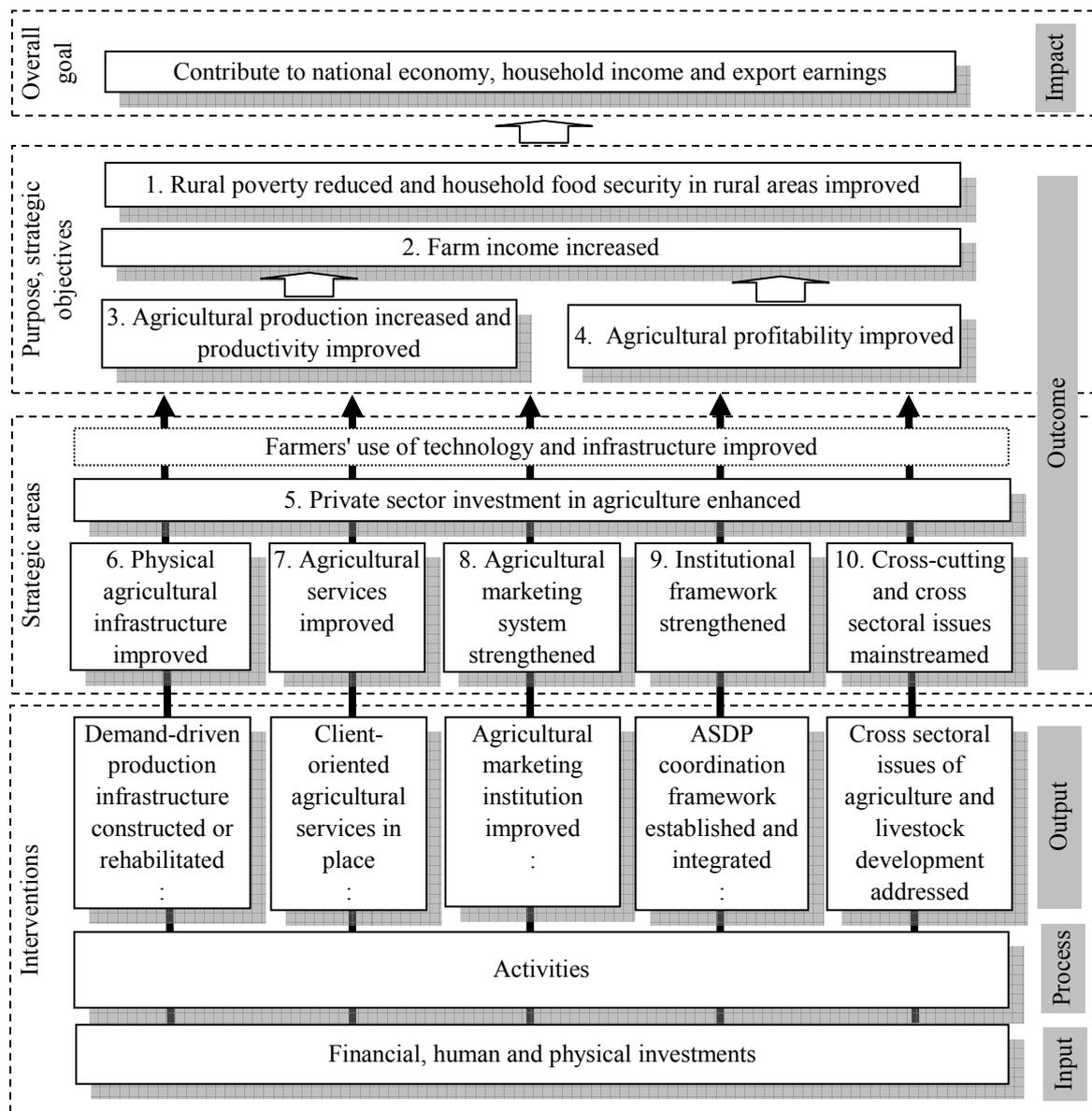


Figure 2.3 Structure of impact, outcome and output statements and their relationship with ASDP

Note: Dashed boxes are ASDS overall goal, purpose, strategic objectives, strategic areas and interventions.

Table 2.1 ASDP Short-listed impact, outcome and output indicators (as of December 2010)

	Indicators	Frequency	Disaggregation			Data source	
			District	Region	National		
Impact (IM)	1. Real agricultural GDP growth rate per annum	Annual			√	NBS	
	2. Headcount ratio in rural areas – basic needs poverty line	Periodical		√	√	NBS (HBS)	
	3. Value of agricultural exports	Annual			√	TRA	
Outcome (OC)	1. Food self-sufficiency ratio	Annual		√	√	MAFC	
	2. Production and productivity of crops and livestock.	Maize	Periodical	√	√	√	NBS (NSCA),
		Paddy					
		Beef	Annual	√	√	√	MLFD
		Milk					
	3. Proportion of smallholder households using improved technologies	Improved seed	Periodical	√	√	√	NBS (NSCA)
		Chemical fertilizers					
		Irrigated farming					
		Improved dairy					
		Erosion control					
	4. Amount of lending to the agricultural sector by private banks	Annual				√	BOT
	5. Proportion of smallholder households using mechanization	Periodical	√	√	√		NBS (NSCA)
	6. Ratio of processed exported agricultural products to total exported agricultural products	Annual				√	TRA
	7. Number of smallholder households participating in contracting production and out-growers schemes	Annual	√	√	√		LGAs
8. Proportion of LGAs that qualify to receive top-up grants	Annual				√	PMO-RALG	
9. Proportion of LGAs that qualify to receive performance bonus	Annual				√	PMO-RALG	
10. Proportion of farmers having visits from public or private extension staff	Periodical	√	√	√		NBS (NSCA)	
11. Amount of fertilizer consumed [PAF]	Annual				√	MAFC	
12. Number of Households using irrigation infrastructure (members of Irrigation Organizations) [PAF]	Annual				√	MAFC	

Output (OP)	1. Number of agricultural production infrastructure	Dams	Annual	√	√	√	LGAs / MLFD
		Charco dams					
		Cattle dips					
		Oxenization centres					
		Veterinary clinics					
	2. Number of agricultural marketing infrastructure and machinery	Livestock secondary markets	Annual	√	√	√	MLFD / LGA
		Livestock primary markets	Annual	√	√	√	LGAs
		Meat processing plants					
		Feeder roads					
		Livestock holding grounds					
Abattoirs							
Slaughter houses							
Slaughter slabs							
Hide and skin sheds							
Pulperies / ginneries / shelling							
Milling machines							
Oil extracting machine							
3. Number of extension officers trained on improved technological packages	Annual	√	√	√	LGAs		
4. Number of SACCOS, members and loans provided for agriculture	Annual	√	√	√	LGAs		
5. Number of agricultural marketing regulations and legislation in place	Annual			√	MIT, MAFC, MLFD		
6. Number of markets where wholesale or retail prices are collected	Annual			√	MIT		
7. Number of ASDP Basket Fund Steering Committee meetings held	Annual			√	ASDP Secretariat		
8. Proportion of DADP quarterly physical and financial progress reports submitted on time	Annual			√	PMO-RALG		
9. Proportion of female members of Planning and Finance Committee	Annual	√	√	√	LGAs		
10. Number of research projects related to crops, livestock and marketing/processing, conducted through ZARDEF	Annual			√	ASLMs		

3. DATA COLLECTION, REPORTING AND REVIEWS

3.1 Data Collection and reporting

3.1.1 Type of data for ASDP M&E

Agricultural information used for ASDP M&E can be broadly categorized as shown in Table 3.1.

Table 3.1 Type of agricultural data / information

Data types		Examples
1. Project-related information (DADP, etc.)	1-1. Input	✓ Expenses, manpower, equipment used for each DADP project (interventions)
	1-2. Output	✓ Area (ha) of irrigation schemes developed / rehabilitated by DADP/ DIDF projects, ✓ Number of cattle dip rehabilitated in a DADP project, ✓ Number of farmers trained in a DADP project, etc.
	1-3. Outcome/ impact	✓ Number of farmers using improved technologies due to a DADP project, ✓ Increase in crop production as a result of a DADP / DIDF project, ✓ Improvement in crop yield as a result of a DADP project, ✓ Decrease in animal mortality rate due to a DADP project, ✓ Increase in income of a farmer due to a DADP project, etc.
2. Agricultural performance information (village, district, regional, national level)	2-1. Input	✓ Total agricultural budget for a district, ✓ Total number of extension officers in a district / region, ✓ Total number of vehicles / motorcycles in a district, etc.
	2-2. Output	✓ Total area under irrigation schemes (developed) in a district, ✓ Total number of certain agricultural machinery / implements in a district, ✓ Total number of cattle dips available in a district, ✓ Total number of farmers trained in a district,
	2-3. Outcome/ impact	✓ Number of farmers using mechanization in a district /region /nation, ✓ Total amount of crop production and acreage in a district, ✓ Total amount of meat production in a district, ✓ Total number of farmers using new technologies, ✓ Overall changes in farmers' income ✓ Value of agricultural export

3.1.2 Project-related information

The first type of agricultural information is project-related ones. Information on input and output (1-1 and 1-2) of each DADP project are collected by respective project committee or DFT members and is summarized in the DADP Physical and Financial Quarterly Progress Report in each LGA. The report is submitted to respective regions, where they are consolidated into a regional report. The report is submitted to the Department of Sector Coordination (DSC), PMO-RALG. The DSC officials consolidate them into a national report and submit it to the ASDP Secretariat, which in turn prepares ASDP Quarterly Progress Reports by incorporating it with the information on ASDP National Component. The report is then submitted to the Committee of ASLMs Directors and ASDP Basket Fund Steering Committee.

To capture outcome information of each DADP project (1-3), a national standard format is being developed jointly by the DADP Planning and Implementation TWG and ASDP M&E TWG at present. The current plan is for LGAs to fill out the format for each project once a year and submit it to respective region. Regional officials consolidate them into a regional report and submit it to PMO-RALG. In PMO-RALG, the reports are consolidated into a national report, which is submitted to the

Committee of ASLMs Directors and ASDP Basket Fund Steering Committee as an annex to the 4th quarter DADP Physical and Financial Progress Report. The flow of input, output and outcome DADP project information is depicted in Figure 3.1.

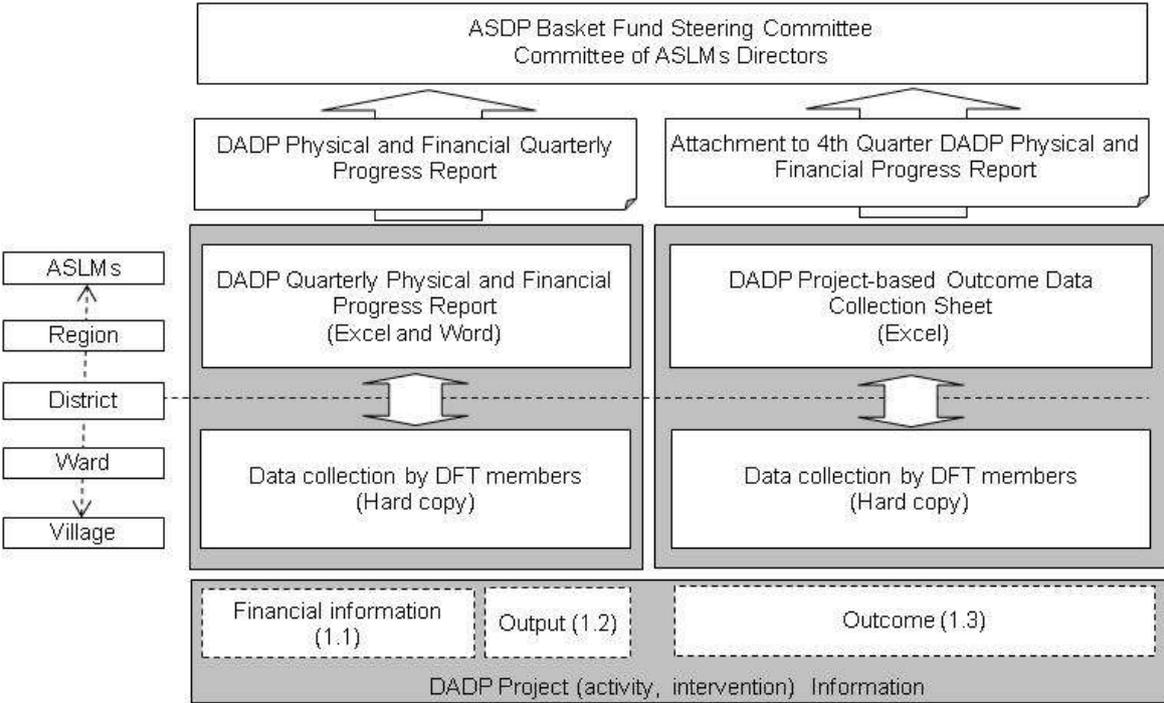


Figure 3.1 Flow of input, output and outcome DADP project information

It is important to note that outcome information for each DADP project (intervention) is different from agricultural performance information at village / district levels (2-3) in that, the former addresses the changes at project level while the latter is concerned with the changes at village or district level as a whole. The difference is depicted in Figure 3.2. As seen in the figure, the project outcomes correspond to individual projects while the performance information represents the whole district covering both project-implemented villages/wards and non-project-implemented ones.

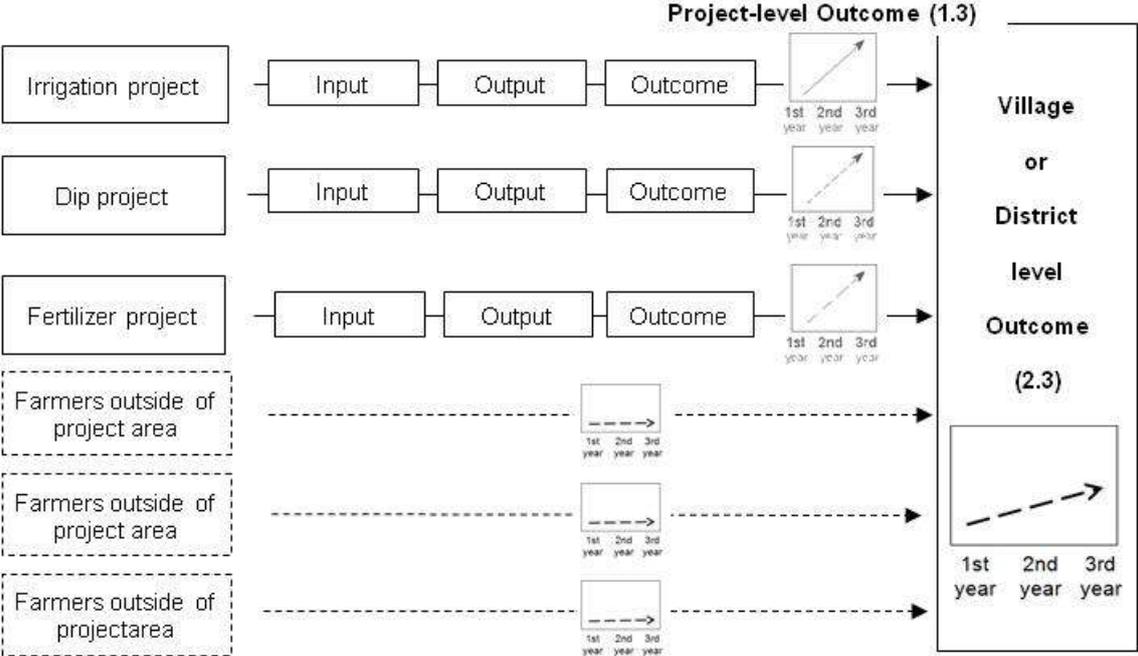


Figure 3.2 Project level outcome and village/district level outcome

3.1.3 Agricultural performance information

The second type is agricultural performance information at village / district / region / national level (type 2). The financial information (2-1) is transmitted using the normal government system as specified by the Ministry of Finance.

As for the output and outcome information (2-2 and 2-3), some sub-sectors have their unique systems in which the data are collected at LGAs or zones and transmitted to national level individually. They include, but not limited to, the following.

- Food forecasting and early warning (food security concerns)
- Livestock disease surveillance and diagnosis (livestock disease control)
- Marketing report (retail and wholesale prices for crops and livestock)
- Zonal irrigation report
- Fish catch assessment survey report
- Agricultural cooperative report
- Research institute report

Other general agricultural information are collected and transmitted through the agricultural Routine Data System. Most data in this type are originated at village / ward levels, which are collected and recorded by village / ward agricultural extension officers (VAEO / WAEO). Standard reporting forms (monthly, quarterly and annual) for VAEO / WAEO (VAEO / WAEO format) have been developed by the ASDP M&E TWG. The information submitted by WAEO is consolidated at district level, which are in turn transmitted to ASLMs via regions using computer software called Local Government Monitoring Database 2 (LGMD2) (quarterly and annual). The LGMD2 uses national standard forms called Integrated Data Collection Format³.

The VAEO/WAEO format, Integrated Data Collection Format and LGMD2 collectively consist of the agricultural Routine Data System (ARDS).

Another method to collect outcome agricultural performance information (2-3) is agricultural surveys undertaken primarily by National Bureau of Statistics (NBS) and ASLMs. Key surveys concerning ASDP are summarized in Table 3.2.

Table 3.2 Types, frequency and disaggregation of surveys concerning agriculture

Types of survey	Frequency	Geographical disaggregation
National Sample Census of Agriculture (NSCA)	5 years (2002/03, 07/08)	District, Region, National
National Panel Survey (NPS)	Every year* (2008/09, 2010/11)	National
Household Budget Survey (HBS)	5 to 7 years (2000/01, 2007)	National, Rural / Urban / DSM
National Population and Housing Census	10 years (2002)	Village through national

* Although NPS is planned to be undertaken every year, it was not implemented in 2009/10 after its initial implementation in 2008/09. The second round is being conducted in 2010/11.

The agricultural surveys are said to provide more reliable information on ASDP outcomes than ARDS because the former directly asks farmers who are randomly sampled while the latter depends on observations of VAEO/WAEO and information from the key informants. On the other hand, a key shortcoming of these surveys is that they are implemented with a long interval (i.e., 5 years in the case of NSCA) except for NPS. Agricultural performance in Tanzania is greatly influenced by weather conditions, which vary largely from year to year. Thus, it is important to have surveys on an annual basis. NPS, if implemented annually, is able to provide annual agricultural information, but it is not certain if it is feasible to undertake a big survey like NPS every year. In addition, even if it is

³ Both VAEO/WAEO format and Integrated Data Collection Format are attached to the ASDP M&E guideline.

undertaken every year, the estimates are available at national level only.

Figure 3.3 depicts the flow of input, output and outcome agricultural performance information.

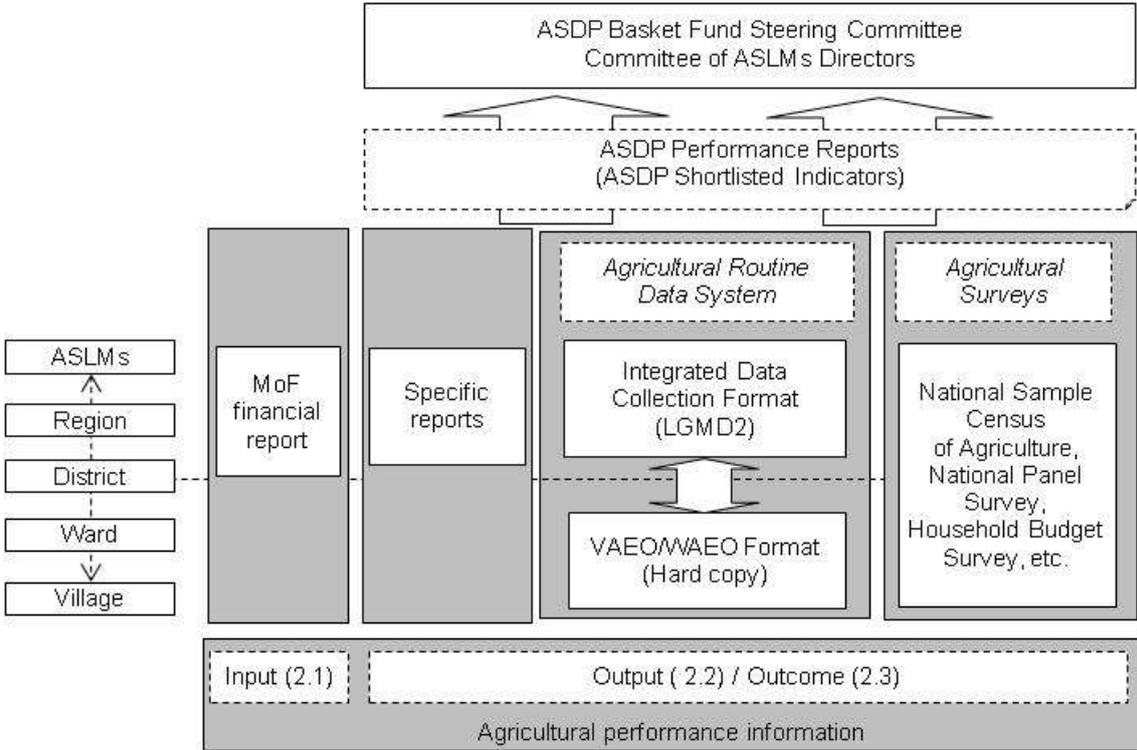


Figure 3.3 Flow of input, output and outcome agricultural performance information

3. 2 Assessment and Reviews

All the reports / survey results explained in the previous section are used for the assessment and reviews of the ASDP. There are primarily three types of assessment / reviews concerning ASDP as explained below.

3.2.1 Types of Reviews

(1) Joint Implementation Review

The Joint Implementation Review is conducted jointly by the ASLMs and DPs every year. The overall purpose of the review is to assess the progress of the ASDP, to evaluate implementation progress, and to identify constraints and hence suggest actions to be taken for smooth implementation of the programme. The review teams visit several districts and regions annually to observe the status of ASDP implementation and examine achievement and challenges with stakeholders such as government officials and farmers. The review provides input to the key ASDP committees, which are the ASDP Basket Fund Steering Committee and the Committee of ASLMs directors.

(2) Agricultural Sector Review and Public Expenditure Review

The Agricultural Sector and Public Expenditure Reviews (ASR/PER) are conducted by the ASLMs, private sector, civil society and DPs on an annual basis. The Review assesses agricultural sector performance and constraints. It also analyzes key policies, institutional reforms and their link to the performance of ASDP. The information/data collected and analyzed in the previous mechanism will be used as a key input for the review. The reviews provide input to the key ASDP committees such as the ASDP Basket Fund Steering Committee and the Committee of ASLMs directors.

(3) LGDG Reviews / Assessments

There are reviews / assessments which are implemented under the Local Government Development

Grant (LGDG) system which is undertaken by the PMO-RALG. The LGDG reviews are also relevant to the ASDP implementation because DADP funds are disbursed to each LGA using the channels of the LGDG system. The reviews under the LGDG system include Quarterly Technical Reviews and annual LGA assessment. The results of these reviews are also used for ASDP M&E.

3.2.2 Schedule of reviews and key committee meetings

In addition to specific reviews explained in the previous section, there are several committee meetings which also play an important role in ASDP M&E. Figure 3.4 shows a typical annual calendar of these reviews / meetings. They may change depending on the circumstances.

Reviews / Committee meetings	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
ASDP Joint Implementation Review			■									
Agricultural Sector Review and Public Expenditure Review		■										
Quarterly Technical Review (LGDG system)	■			■				■			■	
Annual LGA assessment (LGDG system)							■	■	■			
ASDP Basket Fund Steering Committee	■			■				■			■	
Committee of ASLMs Directors	■	■	■	■	■	■	■	■	■	■	■	■

Figure 3.4 Schedule of the key ASDP reviews and committee meetings

4. INSTITUTIONAL ARRANGEMENTS

The responsibilities of key institutions and committees associated with ASDP M&E are summarized in Table 4.1.

Table 4.1: Responsibilities of Key Institutions and Committees in ASDP M&E

Institution / Committee	Major Responsibilities in M&E	Responsible officer
ASDP Basket Fund Steering Committee	<ul style="list-style-type: none"> • Take decisions on quarterly resource transfers based on work plans, budgets, quarterly physical and financial reports, and technical reports. • Monitor the performance and progress of all aspects of ASDP implementation through ASDP Physical and Financial Progress Reports, ASDP Performance Reports, Agricultural Sector Review / Public Expenditure Review Reports, Joint Implementation Reports, etc. • Review audit reports and decide actions for ASDP funding. 	<ul style="list-style-type: none"> • Permanent Secretary, MAFC
Committee of ASLM Directors	<ul style="list-style-type: none"> • Review sector implementation reports and annual reviews on programme implementation. • Responsible for assembling and supervising Thematic Working Groups (TWGs) to implement inter-sectoral activities. • Supervise and manage technical and financial implementation of the ASDP. 	<ul style="list-style-type: none"> • Director of Policy and Planning, MAFC
ASLMs	<ul style="list-style-type: none"> • Prepare reports on national component. • Review reports on local component and provide feedbacks. • Collate data needed to monitor ASDP implementation, analyze and comment on the monitoring results, and submit regular monitoring reports to the BF-SC. • DPPs lead the M&E functions such as assessing the performance of the DADPs. • Link the M&E system of the ASLMs and examine agricultural sector performance at national level. • Coordinate capacity building activities that support better M&E understanding and practices for planners and agricultural staffs in the ASLMs. 	<ul style="list-style-type: none"> • Directors of Policy and Planning
PMO-RALG (specific tasks)	<ul style="list-style-type: none"> • Receive and review DADP Physical and Financial Quarterly Progress Reports from RSSs, collate and forward them to the ASLMs. • Disseminate and maintain LGMD2 at regional and district offices • Report to the LGDG Technical Committee and Steering Committee. 	<ul style="list-style-type: none"> • Director of Sector Coordination • Director of Information, Communication and Technology
National Bureau of Statistics	<ul style="list-style-type: none"> • Conduct census / surveys such as the National Sample Census of Agriculture and the National Panel Survey in collaboration with respective line Ministries. 	<ul style="list-style-type: none"> • Director General
ASDP M&E Thematic Working Group (TWG)	<ul style="list-style-type: none"> • Operationalize M&E framework and revise it as need arises. • Develop and review M&E Guidelines. • Improve and disseminate agricultural routine data system. • Assist NBS in conducting agricultural surveys. • Collect the latest data for the ASDP M&E shortlisted indicators and compile them into ASDP performance reports. 	<ul style="list-style-type: none"> • Chairperson of the TWG

Institution / Committee	Major Responsibilities in M&E	Responsible officer
Regional Secretariats	<ul style="list-style-type: none"> • Provide technical facilitation to LGAs on report preparation. • Monitor DADPs implementation and prepare supervision reports. • Provide feedback to LGAs on their reports. • Consolidate DADP Physical and Financial Quarterly Progress Reports and submit it to PMO-RALG. • Organize annual DADP review meetings. • Approve the data submitted by LGAs through LGMD2. 	<ul style="list-style-type: none"> • Regional Administrative Secretary
Districts	<ul style="list-style-type: none"> • Collect filled-in VAEO/WAEO format and consolidate them to prepare district level report. • Submit district level information to regions / ASLMs using LGMD2. • Monitor DADP activities implemented in the district. • Collect DADP project input, output and outcome information and enter them in DADP Physical and Financial Quarterly Progress Reports. 	<ul style="list-style-type: none"> • District Executive Director
Wards	<ul style="list-style-type: none"> • Monitor village activities. • Complete the VAEO/WAEO format in collaboration with VAEO and submit it to districts 	<ul style="list-style-type: none"> • Ward Executive Officer
Villages / mtaa	<ul style="list-style-type: none"> • Monitor village activities. • Complete VAEO/WAEO format in collaboration with VEOs and submit it WAEO. 	<ul style="list-style-type: none"> • Village Executive Officer
Development Partners	<ul style="list-style-type: none"> • Monitor agricultural sector policies and programme implementation. • Participate in ASDP reviews and TWGs. 	<ul style="list-style-type: none"> • Chairman of Agricultural Working Group
Civil Societies	<ul style="list-style-type: none"> • Monitor the implementation and progress of ASDP. • Provide information for ASDP M&E. 	<ul style="list-style-type: none"> • Chairman of TANGO

GLOSSARY⁴

Activities: Actions in the context of programming which are both necessary and sufficient, and through which inputs are mobilized to produce specific outputs or contribute to the outcome.

Baseline data: Data that describe the situation to be addressed by a programme/project and that serve as the starting point for measuring the performance of that programme/project. A baseline study would analyze and describe the situation prior to receiving assistance. This is used to determine the results and accomplishments of an activity and serve as an important reference for evaluation.

Evaluation: A time-bound exercise that attempts to assess systematically and objectively the relevance, performance and success of ongoing and completed programmes and projects. Evaluation can also address outcomes or other development issues. Evaluation is undertaken selectively to answer specific questions to guide decision-makers and/or programme managers, and to provide information on whether underlying theories and assumptions used in programme development were valid, what worked and what did not work and why. Evaluation commonly aims to determine relevance, efficiency, cross-cutting lessons from operation unit experiences and determining the need for modifications to the strategic results framework. Evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process.

Feedback: As a process, feedback consists of the organization and packaging in an appropriate form of relevant information from M&E activities, the dissemination of that information to target users and, most importantly, the use of the information as a basis for decision-making and the promotion of learning in an organization. Feedback as a product refers to information that is generated through M&E and transmitted to parties for whom it is relevant and useful. It may include findings, conclusions, recommendations and lessons from experiences. Feedback also means comments and responses provided to improve a report/document or a plan submitted from the lower level.

Impact: The broad changes (for example in economic and social terms) brought about by the project or program. The overall and long-term effect of intervention. Impact is the longer-term or ultimate result attributable to a development intervention – in contrast to output and outcome, which reflect more immediate results from the intervention. Examples: higher standard of living, increased food security, increased earnings from exports.

Inputs: The resources such as time, funds, labor, and materials that is necessary to carry out programme or project activities.

Indicator: In monitoring indicators need to be developed to measure performance and these should be quantifiable and easy to monitor. They are signals that reveal progress (or lack thereof) towards objectives; indicators are yardsticks to hint what is happening against what has been planned in terms of quantity, quality and timeliness. An indicator is a quantitative or qualitative variable that provides a simple and reliable basis for assessing achievements, changes or performance. The number of indicators tracked for a given result should be the minimum necessary to ensure that progress toward the result is sufficiently captured.

Monitoring: A continuing function that aims primarily to provide managers and main stakeholders with regular feedback and early indications of progress or lack thereof in the achievement of intended results. Monitoring tracks the actual performance or situation against what was planned or expected according to pre-determined standards. Monitoring generally involves collecting and analyzing data on implementation processes, strategies and results, and recommending corrective measures.

Outcome / Effect: Actual or intended change in development conditions that interventions are seeking to support. It describes a change in development conditions between the comparison of outputs and the achievement of impact. Examples: increased rice yield, increased income for the farmers.

⁴ The glossary is developed based on the definitions drawn from UNDP (2002).

Outputs: Specific tangible products and services that emerge from processing inputs through programme or project activities. These are necessary to achieve the objectives of a programme or project. It is also the measurable results of activities. Example: agricultural extension services provided to rice farmers.

Process: Process means activities carried out by using inputs. It shows activities that have to be undertaken by the project in order to produce the outputs. Activities should be adequate to reflect and outline the indented strategy to accomplish each output.

Stakeholders: People, groups or entities that have a role and interest in the objectives and implementation of a programme/project. They include the community whose situation the programme seeks to change; project field staff who implement activities; project and programme managers who oversee implementation; donors and other decision-makers who decide the course of action related to the programme; and supporters, critics and other persons who influence the programme environment. In participatory evaluation, stakeholders assume an increased role in the evaluation process as question-makers, evaluation planners, data gatherers and problem solvers.

Supervision: Supervision is the process of guiding and helping people to improve their own performance.

REFERENCES

- ASDP M&E Thematic Working Group, ASDP Monitoring and Evaluation Baseline Data Report, September 2008.
- ASDP M&E Thematic Working Group, ASDP Monitoring and Evaluation Progress Report 2008/09, September 2009.
- ASLM Working Group for Monitoring and Evaluation of ASDP, Report of Field Visit to Dodoma 11th to 15th December 2006.
- Emoto, Satoko, (Final Draft) Study on ASLMs' Monitoring and Evaluation (M&E) Capacity for District Agricultural Development Plans (DADPs) implemented within the Agricultural Sector Development Programmed (ASDP), July 2006.
- FAO-World Bank, ASDP Working paper on Monitoring and Evaluation, Third Draft, July 2003.
- Ramadhani, Salum, and Daniel Ticehurst. Monitoring and Evaluation Framework: Draft Proposal for discussion", July 5, 2005
- United Republic of Tanzania, Agricultural Development Support Program (ASDP), Joint Implementation Review April 10-24, 2007, Aide-Memoire, May 2007.
- United Republic of Tanzania, Agricultural Sector Development Programmed (ASDP): Guidelines for District Agricultural Development Planning and Implementation, November 2006a
- United Republic of Tanzania, A Memorandum of Understanding for the Establishment of the Agricultural Sector Development Programme Basket Fund Between The Government of the United Republic of Tanzania and Development Partners, 27 June 2006b.
- United Republic of Tanzania, The Agricultural Sector Development Programmed (ASDP) Support Through Basket Fund Government Programmed Document, 25th May 2006c.
- United Republic of Tanzania, President Office Regional Administration and Local Government, *Local Government Capital Development Grant (LGCDG) System Implementation and Operations Guide*, July 2005a.
- United Republic of Tanzania, District Agricultural Development Plans Support Programmed July 2005-June 2012, A Sub-Component of the Agricultural Sector Development Programmed (ASDP): Volume II: Annexes, Annex 2 M&E Current Practices, Issues and Recommendations, Draft 9th May 2005b.
- United Republic of Tanzania, The Agricultural Sector Development Programmed Framework and Process Document, March 2003.
- United Republic of Tanzania, The Agricultural Sector Development Strategy, October 2001.
- Wambura, Charles and Michio Watanabe, Fact Finding Study on the Uses of PlanRep/LGMD and Routine Data Collection System in Tanga Region, October 2006.
- United National Development Programmed (UNDP), Handbook on Monitoring and Evaluating for Results, 2002.

ANNEX 1. Long-listed Indicators (Draft)

Indicators in bold are short-listed indicators.

Impact indicators

Component	Indicator	Data source
Contribute to national economy		
Impact	Real GDP growth rate per annum (Agricultural sector, Livestock Sub-Sector) [MKUKUTA]	NBS
Contribute to household income		
Impact	Headcount ratio – basic needs poverty line [MKUKUTA]	NBS (HBS)
Contribute to export earnings		
Impact	Value of agricultural exports	TRA

1. Rural poverty reduced and household food security in rural areas improved

Component	Indicator / Statement	Data source
Outcome	Proportion of households who take no more than one meal per day [MKUKUTA]	
1.1 Food security policies developed		
Output	Food security policy in place	
Output	Number of councils with by-laws which sets the minimum acreage of food crops for each household	
1.2 Plans for addressing household food insecurity promoted		
Output	Number of plans addressing household food insecurity	
Output	Number of households that have storage facilities	

2. Farm income increased

Component	Indicator	Data source
Outcome	Production and productivity of crops and livestock	NBS (HBS)

3. Agricultural production increased and productivity improved

Component	Indicator	Data source
Outcome	Food self-sufficiency ratio [MKUKUTA]	MAFC

Outcome	Proportion of districts reported to have food shortages [MKUKUTA]	
Outcome	Farmers agricultural production and productivity increased [MKUKUTA]	

4. Agricultural profitability improved

Component	Indicator / Statement	Data source
Outcome	Share of farm-gate prices to wholesale, retail and export prices	

5. Private investment in agricultural sector enhanced

Component	Indicator / Statement	Data source
Outcome	Flow of private funds into agricultural and livestock sectors	TIC
5.1 Policies and regulations that attract private investment in place (tax, budget allocation, information, laws)		
Output	Number of agricultural investment policies and regulations in place	
Output	Number of procedures and processes for investors reviewed	
Output	Number of agricultural investment incentives offered	
5.2 Effective procedures and processes to acquire land for agricultural investment in place		
Output	Proportion of land applications approved within 90 days	
Output	Number of LGAs in which agricultural land survey has been completed	
Output	Number of agricultural land survey experts in each district	

6. Physical agricultural infrastructure improved

Component	Indicator	Data source
Outcome	Proportion of households using physical agricultural infrastructure (dams, irrigation, wells, storage)	
Outcome	Volumes of marketed agricultural products	
6.1 Constructed or rehabilitated demand-driven agricultural production infrastructure		
Output	Number of agricultural production infrastructure existing and in operation	LGAs
Input	% of budget (GoT and DPs) on agricultural production infrastructure	
6.2 Constructed or rehabilitated demand-driven agricultural marketing infrastructure		
Output	Number of agricultural marketing infrastructure and machinery existing and in operation	LGAs
Input	% of budget (GoT and DPs) on agricultural marketing infrastructure	

7. Agricultural services improved

Component	Indicator / Statement	Data source
Outcome	Proportion of farmers satisfied with public and or private agricultural services (Extension, information, research, finance)	
Outcome	Proportion of households accessing public and or private agricultural services (Extension, research)	
Outcome	Proportion of smallholder households using improved technologies (improved seeds, pesticides/fungicides, chemical fertilizers, irrigated farming, improved beef, improved dairy cow and erosion control)	NBS (NSCA)
Outcome	% of smallholders who accessed formal credit (commercial banks and cooperatives (SACCOS/SACAS)) for agricultural purposes [MKUKUTA]	
Outcome	Amount of loan provided by commercial banks and cooperatives in the agricultural sector	
Outcome	Proportion of smallholder households using mechanization (power tillers, tractors, combine harvesters and oxenization)	NBS (NSCA)
7.1 Client-oriented agricultural services (Extension, information, research, finance) in place		
Output	Number of client-oriented programmes conducted by research institutes increased	
Output	Number of active private agricultural service providers	
Output	Number of farmers trained on new technologies	LGAs
Output	Number of technological packages promoted and disseminated (new varieties of seeds, pesticides, improved breeds, new animal drugs)	
Input	% of budget (GoT and DPs) on agricultural research and technology development	
7.2 Demand-driven agricultural extension system strengthened		
Output	Ratio of farmers to extension officers	
Output	Number of extension officers trained on improved technological packages	LGAs
Output	Number of private agricultural service providers trained	
Input	% of budget (GoT and DPs) for A-EBG. (Agricultural Extension Block Grant)	
7.3 Demand-driven agricultural training strengthened		
Output	Number of farmers trained	
Output	Number of training institutes that have reviewed and/or improved their curricula	
Input	% of budget (GoT and DPs) on agricultural training institutes	
7.4 Financial services improved		
Output	Value of loans provided by SACCOs for agriculture	LGAs
Output	Number of members of rural micro finance institutions (SACCOS/SACAS) trained	
Input	% of budget (GoT and DPs) for micro finance outreach programme	

8. Agricultural marketing system strengthened

Component	Indicator / Statement	Data source
Outcome	Value of agricultural product marketed increased (through processing)	
Outcome	Ratio of processed exported agricultural products to total exported agricultural products	TRA
Outcome	Proportion of farmers accessing market information	
Outcome	Proportion of smallholder households participating in contracting production and out-growers schemes [MKUKUTA]	LGAs
8.1 Agricultural marketing institutions improved		
Output	Number of agricultural marketing regulations and legislation in place	MIT
Output	Number of standards reviewed and implemented	
Input	% of MIT budget for marketing and processing	
8.2 Cross-border trade legalized and promoted		
Output	Number of barriers to cross-border trade removed	
Output	Average number of days by product it takes to complete export procedures	
8.3 Market information improved		
Output	Number of client-oriented information systems and centers in place	
Output	Number of markets where wholesale and retail prices are collected	MIT
Output	Number of media that provide market information	
8.4 Value chain improved		
Output	Proportion of agricultural and livestock products with value chain identified (traceability)	
8.5 Marketing skills strengthened		
Output	Number of persons trained on agribusiness	
8.6 Partnership promoted		
Output	Number of sensitization seminars on out-grower and contract-farming schemes conducted	
Output	Proportion of villages covered by telephone network	
Input	% of budget allocated for out-grower and contract-farming schemes outreach programme	
8.7 Access to input improved		
Output	Number of stockists trained	
Output	Number of licensed stockists	

9. Institutional framework strengthened

Component	Indicator / Statement	Data source
Outcome	Proportion of LGAs that qualify to receive top-up grants	PMO-RALG
Outcome	Proportion of LGAs that qualify to receive performance bonus	PMO-RALG
Outcome	Increased performance of stakeholders in implementation of the ASDP	
9.1 ASDP coordination framework established and integrated		
Output	Number of Inter-Ministerial Coordination Committee (ICC) meetings held	ASDP Secretariat
Output	Number of ASDP Basket Fund Steering Committee meetings held	
Output	Number of ASLMs Directors Committee meetings held	
Output	Number of activities carried out by ASDP Secretariat referencing ToR	
Input	Number of officers in the ASDP Secretariat	
Input	% of budget allocated to the ASDP Secretariat	
9.2 Capacity of ASLMs, regional secretariat, LGAs strengthened		
Output	Ratio of posts filled by qualified staff	
Output	Number of officers trained on ASDP	
Output	Number of monitoring reports submitted on time	
Output	Proportion of quarterly progress reports submitted on time	Regions/ASLMs
Output	% of LGA department (DALDO) having at least one vehicle	
Output	% of WAEO having a motorbike	
Output	% of VAEO having a bicycle	
Input	% of budget allocated for A-CBG (Agricultural Capacity Building Grant)	
9.3 Farmers organizations promoted		
Output	Number of farmer groups trained	
Output	Number of farmer groups provided with funds, equipment and materials	
Input	% of budget allocated for farmers field school (FFS) programme	
9.4 Civil society organizations promoted		
Output	Number of civil society organizations sensitized on ASDP	
Input	% of budget allocated for civil society outreach programme	

10. Cross-cutting and cross sectoral issues mainstreamed

Component	Indicator / Statement	Data source
Outcome	Existence of other sectors' plans supporting agriculture developed and implemented	
Outcome	Existence of other sectors' plans in agricultural plans	
Outcome	Proportional of HIV/AIDS affected households that have adopted coping strategies	
10.1 Cross sectoral issues of agriculture and livestock development addressed		
Output	Number of households that have access to potable water within 400m	
Output	Number of villages covered by electricity services	
10.2 Spread and impact of HIV/AIDS and malaria minimized		
Output	Number of seminars to enhance awareness on HIV/AIDS and malaria	
10.3 Gender issues mainstreamed in agricultural development plans		
Output	Number of seminars to enhance awareness on gender	
Output	Proportion of female members of Planning and Finance Committee	LGAs
Output	Number of agricultural technologies developed to reduce the workload of women	
10.4 Environmental management improved		
Output	Number of seminars on environmental management conducted	
Output	Number of soil and water conservation technologies developed	
Output	Number of projects under ASDP with environmental impact assessment plans	

ANNEX 2. Short-listed Indicators

IMPACT INDICATORS

Impact indicator 1	Agricultural GDP growth rate per annum (agricultural sector, crop and livestock sub-sectors)
Definition	Difference between GDP (of the particular sector) in year x+1 and GDP in year x (at constant prices), expressed as percentage of the GDP in year x.
Rationale	The indicator is used to monitor the growth of sectors of the economy in the country.
Frequency of reporting	Annual
Impact statement concerned	Contribute to national economy
Data sources	NBS National Account
Responsibility for data collection	NBS
Disaggregation	National
Risk	No risk
Comments	This is a MKUKUTA indicator.

Impact indicator 2	Headcount ratio in rural areas – basic needs poverty line
Definition	The proportion of the population who live in households for which the consumption expenditure falls below an internationally agreed poverty line for basic needs requirements.
Rationale	The indicator allows for monitoring the proportion of the national population that is considered poor using the national standards.
Frequency of reporting	Periodical
Impact statement concerned	Contribute to household income
Data sources	Household Budget Survey (HBS)
Responsibility for data collection	NBS
Disaggregation	Regional, National
Risk	The survey is supposed to be conducted every five years, but there have been longer intervals.
Comments	This is a MKUKUTA indicator.

Impact indicator 3	Value of agricultural export
Definition	The value (in US dollar) of the export of agricultural products from Tanzania to the rest of the world.
Rationale	An improvement in productivity and quality in agriculture is expected to lead to an increase in the value of exports of agricultural products and contributes to foreign currency earnings.
Frequency of reporting	Annual
Impact statement concerned	Contribute to export earnings
Data sources	TRA
Responsibility for data collection	TRA
Disaggregation	National
Risk	No risk
Comments	The same product categories by HS code shown in “Annex to Table IM3” should be used in the subsequent years.

OUTCOME INDICATORS

Outcome indicator 1	Food self-sufficiency ratio
Definition	The percentage ratio of gross domestic production to gross domestic food requirements.
Rationale	The indicator measures whether national food production meets gross food requirements. The same also applies at the regional level where the indicator tells the extent to which a region's annual food production satisfies its population needs. At 100% self-sufficiency ratio (SSR) the food produced in the current year will be equal to food required during the next consumption year. A situation where food produced is in the range of 100 - 120% is considered self-sufficient. When the SSR is 120% and above the situation is considered surplus. <ul style="list-style-type: none"> • SSR < 100% Food deficit • 100% ≤ SSR < 120% Self-sufficient • SSR ≥ 120% Surplus
Frequency of reporting	Annual
Outcome statement concerned	Agricultural production increased and productivity improved
Data sources	Crop Monitoring and Early Warning, National Food Security Division, MAFC
Responsibility for data collection	MAFC
Disaggregation	National, Regional
Risk	No risk
Comments	This is a MKUKUTA indicator.

Outcome indicator 2	Production and productivity of crops and livestock
Definition	The indicators measure total quantity produced and quantity produced per unit of production for the following products. <ul style="list-style-type: none"> - Maize (tons; tons/hectare) - Paddy (tons; tons/hectare) - Beef (tons; kgs/head): total weight of cattle slaughtered x 55% - Milk (litres; litres/head)
Rationale	Production and productivity are the most important indicators for measuring performance of the agricultural and livestock subsectors.
Frequency of reporting	Maize and Paddy: Periodical (NSCA)/Annual (NPS) (For acronyms, see the data sources) Beef and Milk: Annual
Outcome statement concerned	Agricultural production increased and productivity improved
Data sources	Maize and Paddy: National Sample Census of Agriculture (NSCA), National Panel Survey (NPS) Agricultural Module Beef and Milk: MLFD
Responsibility for data collection	NBS, MLFD
Disaggregation	Region and District (NSCA), National (NSCA, NPS, MLFD)
Risk	No risk
Comments	1) Data may not be available on time due to delays in implementation of the surveys. 2) Data may not be accurate due to the methodology of data collection through interview and self-reporting from the respondents without physical measurements of farmlands and outputs.

Outcome indicator 3	Proportion of smallholder households using improved technologies
Definition	Proportion of smallholder households using improved technologies: <ul style="list-style-type: none"> - Improved seeds, - Chemical fertilizer, - Irrigation, - Improved dairy - Erosion control
Rationale	It describes the farming husbandry and technical interventions best practices recommended and used.
Frequency of reporting	Periodical (NSCA)/Annual (NPS) (For acronyms, see the data sources)
Outcome statement concerned	Agricultural services improved
Data sources	National Sample Census of Agriculture (NSCA) and National Panel Survey (NPS) Agricultural Module
Responsibility for data collection	NBS
Disaggregation	Region and District (NSCA), National (NSCA and NPS)
Risk	No risk
Comments	1) Data may not be available on time due to delays in implementation of the surveys. 2) Data may not be accurate due to the methodology of data collection through interview and self-reporting from the respondents without physical measurements of farmlands and outputs

Outcome indicator 4	Flow of private funds into the agricultural sectors
Definition	The amount (Tanzania Shilling) of lending to the agricultural sector by domestic private banks
Rationale	To measure medium and large investors investment supporting agriculture industry
Frequency of reporting	Annual
Outcome statement concerned	Private investment in the agricultural sector enhanced
Data sources	Bank of Tanzania
Responsibility for data collection	MAFC
Disaggregation	National
Risk	No risk
Comments	

Outcome indicator 5	Proportion of smallholder households using mechanization
Definition	Proportion of smallholder households using mechanization: <ul style="list-style-type: none"> - Ox plough - Ox planter - Ox cart - Tractor - Tractor Plough - Power tiller
Rationale	Mechanization is a necessary condition for farmers to improve productivity. These indicators show the degree of agricultural mechanization.
Frequency of reporting	Periodical (NSCA)/Annual (NPS) (For acronyms, see the data sources)

Outcome statement concerned	Agricultural services improved
Data sources	National Sample Census of Agriculture (NSCA) and National Panel Survey (NPS) Agricultural Module
Responsibility for data collection	NBS
Disaggregation	Region and District (NSCA), National (NSCA and NPS)
Risk	No risk
Comments	Data may not be available on time due to delays in implementation of the surveys.

Outcome indicator 6	Ratio of processed exported agricultural products to total exported agricultural products
Definition	(Value of processed exported agricultural products) / (Value of exported agricultural products).
Rationale	Currently many agricultural products have been exported without being processed. As a result, little value has been added domestically. The government has been eager to increase the export of processed agricultural products in order to increase the value-added within the country.
Frequency of reporting	Annual
Outcome statement concerned	Agricultural marketing system strengthened
Data sources	TRA
Responsibility for data collection	TRA
Disaggregation	National
Risk	No risk
Comments	The same product categories by HS code for agricultural products and processed agricultural products shown in “Annex to Table OC6” should be used in subsequent years.

Outcome indicator 7	Number of smallholder households participating in contracting production and out-growers schemes
Definition	Smallholder households who participate in contracting production and out-growers schemes, as percentage of all smallholder households. <u>Contracting production</u> is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products detailed in formal contracts. <u>An out-growers scheme</u> is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products that may not involve formal contracts. The company may provide smallholders some services, such as input credits, tillage, spraying and harvesting. The smallholder provides land and labor in return for the extension/input package.
Rationale	Contract farming and out-growers schemes are one of the important aspects of strengthened agricultural marketing system.
Frequency of reporting	Annual
Outcome statement concerned	Agricultural marketing system strengthened
Data sources	LGAs
Responsibility for data collection	LGAs
Disaggregation	District, Regional, National

Risk	No risk
Comments	This is a MKUKUTA indicator, and the MKUKUTA Monitoring Master Plan and Indicator Information (Dec. 2006, p.78) mentions the National Sample Census of Agriculture (NSCA) as a data source. However, NSCA does not contain information on this indicator. Thus, the data need to be collected from LGAs.

Outcome indicator 8	Proportion of LGAs that qualify to receive top-up grants
Definition	LGAs qualify to receive enhanced DADP when the following minimum conditions are met. 1. District qualifies for Capital Development Grant 2. Position of DALDO filled 3. Council has a DADP 4. Evidence of commitment to the participatory process 5. Evidence of a commitment to reform agricultural extension services.
Rationale	This indicator assesses the degree of fulfillment of LGCDG conditions, which is a part of LGAs' performance.
Frequency of reporting	Annual
Outcome statement concerned	Institutional framework strengthened
Data sources	PMO-RALG
Responsibility for data collection	PMO-RALG
Disaggregation	National
Risk	No risk
Comments	As the ASDP is implemented, there is a possibility that the minimum conditions be altered. In that case, consistency of the data may be violated.

Outcome indicator 9	Proportion of LGAs that qualify to receive performance bonus
Definition	The amount of performance bonus is assessed based on the following criteria. 1. DADP prepared and implemented according to guidelines and as part of DDP (35 points) 2. District Agricultural Services Reform and contracting (20 points) 3. Agricultural investments follow standards of compliance and technical audit conducted.(30 points) 4. Policy and regulatory (15 points)
Rationale	It assesses the performance of councils from the aspects of consistency with ASDP.
Frequency of reporting	Annual
Outcome statement concerned	Institutional framework strengthened
Data sources	LGDG System
Responsibility for data collection	PMO-RALG
Disaggregation	National
Risk	No risk
Comments	In 2006/07, only a part of the performance measures were used in the assessment. ASLMs and ASDP-supporting DPs have agreed that the assessment criteria be revised because a far larger number of LGAs than previously anticipated were qualified for performance bonus. A more rigorous standard may be applied, which may affect data consistency.

Outcome indicator 10	Proportion of farmers having visits from public or private extension staff
Definition	Proportion of farmers who receive extension advice for crop production or livestock extension advice by <ul style="list-style-type: none"> - Government extension, - NGO/development projects, - Cooperative or - Large scale farmers.
Rationale	It indicates the effectiveness of extension services and the degree of dissemination of improved technologies.
Frequency of reporting	Periodical
Outcome statement concerned	Agricultural services improved
Data sources	National Sample Census of Agriculture (NSCA) and National Panel Survey (NPS) Agricultural Module
Responsibility for data collection	NBS
Disaggregation	National
Risk	No risk
Comments	

Outcome indicator 11	Amount of fertilizer consumed
Definition	The amount of fertilizer consumed by farmers during the year
Rationale	It assesses the performance of councils from the aspects of consistency with ASDP.
Frequency of reporting	Annual
Outcome statement concerned	Agricultural services improved
Data sources	MAFC, Department of Crop Development
Responsibility for data collection	MAFC, , Department of Crop Development
Disaggregation	National
Risk	
Comments	This is an indicator for annual PAF (Performance Assessment Framework)

Outcome indicator 12	Number of households using irrigation infrastructure
Definition	Number of members that belong to Irrigation Organizations.
Rationale	It indicates the number of beneficiaries of irrigation scheme development
Frequency of reporting	Annual
Outcome statement concerned	Agricultural services improved
Data sources	MAFC, Department of Irrigation Technical Services
Responsibility for data collection	MAFC, Department of Irrigation Technical Services
Disaggregation	National
Risk	
Comments	

OUTPUT INDICATORS

Output indicator 1	Number of agricultural production infrastructure
Definition	Number of agricultural production infrastructure existing and in operation (as of 30 th June of each year) : <ul style="list-style-type: none"> - Dams (excluding hydro-power dams) - Charco dams - Dips - Oxenization centers - Veterinary clinics
Rationale	It indicates capability of ASLMs and LGAs to improve and expand agricultural production infrastructure.
Frequency of reporting	Annual
Output statement concerned	Constructed and/or rehabilitated demand-driven agricultural production infrastructure enhanced
Data sources	LGAs
Responsibility for data collection	LGAs
Disaggregation	District, Regional, National
Risk	No risk
Comments	None

Output indicator 2	Number of agricultural marketing infrastructure and machinery
Definition	Number of agricultural marketing infrastructure and machinery existing and in operation (as of 30 th June of each year) <ul style="list-style-type: none"> - Livestock primary markets - Livestock secondary markets - Livestock holding grounds - Feeder roads (km) - Abattoirs - Slaughter houses - Slaughter slabs - Hide and skin sheds - Pulperies, ginneries, shelling - Milling machines - Oil extracting machines
Rationale	It indicates capability of ASLMs and LGAs to improve and expand agricultural marketing infrastructure and machinery
Frequency of reporting	Annual
Output statement concerned	Constructed or rehabilitated demand-driven agricultural marketing infrastructure enhanced
Data sources	LGAs
Responsibility for data collection	LGAs
Disaggregation	District, Regional, National
Risk	No risk
Comments	None

Output indicator 3	Number of extension officers trained on improved technological packages
Definition	Number of extension officers trained on improved technological packages on crop, livestock, and marketing and processing.

	Improved technological packages include improved seeds, herbicides, pesticides, fungicides, crop storage, fertilizer, spacing, erosion control, irrigation, vermin/rodent control, agro-forestry, etc.
Rationale	It is a proxy indicator for farmers' adoption of improved agricultural technologies.
Frequency of reporting	Annual
Output statement concerned	Demand-driven agricultural extension system strengthened
Data sources	LGAs
Responsibility for data collection	LGAs
Disaggregation	District, Region, National
Risk	No risk
Comments	Extension officers receive training not only at MATIs/LITIs but also at different occasions such as those offered by NGOs. Thus, districts are a better place than MATIs/LITIs to obtain this information.

Output indicator 4	Number of SACCOS, members and loans provided for agriculture
Definition	The number of SACCOS members, amount of loans provided by SACCOS for agriculture, livestock, and business (e.g., marketing and processing).
Rationale	Rural micro finance is very important for farmers to improve productivity. This indicator addresses farmers' accessibility to credit.
Frequency of reporting	Annual
Output statement concerned	Financial services improved
Data sources	LGAs
Responsibility for data collection	Cooperatives Development Officer, LGAs
Disaggregation	District, Region, National
Risk	No risk
Comments	<p>This indicator focuses on SACCOS because SACCOS is the most important micro finance institution for farmers. SACAS is under the jurisdiction of the Ministry of Home Affairs, and it is more difficult to collect data.</p> <p>As for the number of SACCOS, it is also available from Cooperatives Development Division, MAFC, although some regions/LGAs fail to submit data regularly.</p>

Output indicator 5	Number of agricultural marketing regulations and legislation in place
Definition	Number of agricultural marketing acts which create an enabling environment for commercialization in place.
Rationale	To harmonize the existing fragmented and inconsistent laws in agricultural marketing to standardize marketing activities.
Frequency of reporting	Annual
Output statement concerned	Agricultural marketing institutions improved
Data sources	MAFC, MLD, MIT
Responsibility for data collection	MIT
Disaggregation	National

Risk	
Comments	

Output indicator 6	Number of markets where wholesale or retail prices are collected
Definition	Number of places (markets) where wholesale or retail prices information on agricultural produce are collected
Rationale	It indicates the availability of market information to stakeholders.
Frequency of reporting	Annual
Output statement concerned	Market information improved
Data sources	MIT
Responsibility for data collection	MIT
Disaggregation	District, Regional, National
Risk	No risk
Comments	None

Output indicator 7	Number of ASDP Basket Fund Steering Committee meetings held
Definition	Number of ASDP Basket Fund Steering Committee (BF-SC) meetings organized and held during the year under ASDP
Rationale	This indicator shows the extent to which the ASLMs are brought together through ASDP BF-SC meetings during the implementation of ASDP.
Frequency of reporting	Annual
Output statement concerned	ASDP coordination framework established and integrated
Data sources	ASDP BF-SC minutes
Responsibility for data collection	ASDP Secretariat
Disaggregation	National
Risk	No risk
Comments	None

Output indicator 8	Proportions of regions submitted quarterly progress reports on time
Definition	Proportion of DADP Physical and Financial Quarterly Progress Reports submitted by regions to PMO-RALG in each quarter.
Rationale	The indicator indicates the effectiveness of reporting flows from LGAs to ASLMs, which is a part of institutional strengthening.
Frequency of reporting	Annual
Output statement concerned	Capacity of ASLMs, regional secretariat, LGAs strengthened
Data sources and verification	PMO-RALG
Responsibility for data collection	PMO-RALG
Disaggregation	District, Regional, National
Risk	No risk
Comments	The deadline of report submission, “within two weeks” is reasonable but close follow up is necessary.

Output indicator 9	Proportion of female members of Planning and Finance Committee
Definition	Proportion of female members of Planning and Finance Committee in each district.
Rationale	It indicates the level of involvement of women in planning,

	implementation and decision making processes.
Output statement concerned	Gender issues mainstreamed in agricultural development plans
Data sources	LGAs
Frequency of reporting	Annual
Responsibility for data collection	LGAs
Disaggregation	District, Regional, National
Risk	
Comments	Village level information is very difficult to obtain.

Output indicator 10	Number of research projects related to crops, livestock and marketing/processing, conducted through ZARDEF
Definition	Number of research projects related to crops, livestock and marketing/processing, conducted through ZARDEF
Rationale	It indicates implementation of demand-oriented research activities.
Output statement concerned	Client-oriented agricultural services (Extension, information, research, finance) in place
Data sources	Zonal research offices
Frequency of reporting	Annual
Responsibility for data collection	MAFC, MLFD
Disaggregation	National
Risk	No risk
Comments	

Annex 3 Commodities included in “agricultural exports” (Impact Indicator 3)

HS Code	Description	HS Code of Commodities included
Section 1: Animal and Animal Products		
01	Live animals	0101-0105
02	Meat and edible meat offal	0201-0207, 0209, 021011-021020
03	Fish and crustaceans, mollusks and other aquatic invertebrates	Not included
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	All: 0401-0410
05	Products of animal origin, not elsewhere specified or included	0502-0506, 051110, 051199
Section 2: Vegetable Products		
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	All: 0601-0604
07	Edible vegetables and certain roots and tubers	All: 0701-0714
08	Edible fruit and nuts; peel of citrus fruit or melons	All: 0801-0814
09	Coffee, tea, maté and spices	All: 0901-0910
10	Cereals	All: 1001-1008
11	Products of the milling industry; malt; starches; inulin; wheat gluten	All: 1101-1109
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	1201-1211, 121291-121299, 1213-1214
13	Lac; gums, resins and other vegetable saps and extracts	All: 1301-1302
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	All: 1401-1404
Section 3: Animal or Vegetable Fats and Oils and their Cleavage Products, Prepared Edible Fats, Animal or Vegetable Waxes		
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	1501-1503, 1505-1522
Section 4: Prepared Foodstuffs, Spirits and Vinegar, Tobacco and Manufactured Tobacco Substitutes		
16	Preparations of meat, of fish or of crustaceans, mollusks or other aquatic invertebrates	1601-1603
17	Sugars and sugar confectionery	All: 1701-1704
18	Cocoa and cocoa preparations	All: 1801-1806
19	Preparations of cereals, flour, starch or milk; pastry cooks' products (bakers wares)	All: 1901-1905
20	Preparations of vegetables, fruit, nuts or other parts of plants	All: 2001-2009
21	Miscellaneous edible preparations	All: 2101-2106
22	Beverages, spirits and vinegar	All: 2201-2209
23	Residues and waste from the food industries; prepared animal fodder	All: 2301-2309
24	Tobacco and manufactured tobacco substitutes	All: 2401-2403
Section 7: Plastics and Articles Thereof; Rubber and Articles Thereof		
39	Plastics and articles thereof	Not included
40	Rubber and articles thereof.	4001
Section 8: Raw Hides and Skins, Leather, Fur skins and Articles Thereof, Saddlery and Harness, Travel Goods, Handbags and Similar Containers, Articles of Animal Gut (Other than Silk-Worm Gut)		
41	Raw hides and skins (other than fur skins) and leather	All: 4101-4115
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	Not included
43	Fur skins and artificial fur; manufactures thereof	4301-4302
Section 11: Textiles and Textile Articles		
50	Silk	5001-5003
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	5101-5105
52	Cotton	5201-5203
53	Other vegetable textile fibers; paper yarn and woven fabrics of paper yarn	5301-5305
Chapters 54-63 of this section are not shown here since they are man-made fibers, textiles and apparels.		

Annex 4 Commodities included in “Processed agricultural export” (Outcome indicator 6)

HS Code	Description	HS Code of commodities included
Section 1: Animal and Animal Products		
01	Live animals	None
02	Meat and edible meat offal	None
03	Fish and crustaceans, mollusks and other aquatic invertebrates	Not included in agric. exports
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	0401-0406, 04090010
05	Products of animal origin, not elsewhere specified or included	None
Section 2: Vegetable Products		
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	None
07	Edible vegetables and certain roots and tubers	0710-0711
08	Edible fruit and nuts; peel of citrus fruit or melons	0811-0813
09	Coffee, tea, mate and spices	090121-090190, 090230, 090240, 090412, 090420, 090620
10	Cereals	None
11	Products of the milling industry; malt; starches; inulin; wheat gluten	All: 1101-1109
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	None
13	Lac; gums, resins and other vegetable saps and extracts	None
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	None
Section 3: Animal or Vegetable Fats and Oils and their Cleavage Products, Prepared Edible Fats, Animal or Vegetable Waxes		
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	1501-1503, 1505-1522
Section 4: Prepared Foodstuffs, Sprits and Vinegar, Tobacco and Manufactured Tobacco Substitutes		
16	Preparations of meat, of fish or of crustaceans, mollusks or other aquatic invertebrates	1601-1603
17	Sugars and sugar confectionery	All: 1701-1704
18	Cocoa and cocoa preparations	1803-1806
19	Preparations of cereals, flour, starch or milk; pastry cooks' products (bakers wares)	All: 1901-1905
20	Preparations of vegetables, fruit, nuts or other parts of plants	All: 2001-2009
21	Miscellaneous edible preparations	All: 2101-2106
22	Beverages, spirits and vinegar	All: 2201-2209
23	Residues and waste from the food industries; prepared animal fodder	All: 2301-2309
24	Tobacco and manufactured tobacco substitutes	2402-2403
Section 7: Plastics and Articles Thereof; Rubber and Articles Thereof		
39	Plastics and articles thereof	Not included in agric. exports
40	Rubber and articles thereof	None
Section 8: Raw Hides and Skins, Leather, Fur skins and Articles Thereof, Saddler and Harness, Travel Goods, Handbags and Similar Containers, Articles of Animal Gut (Other than Silk-Worm Gut)		
41	Raw hides and skins (other than fur skins) and leather	4104-4115
2	Articles of leather; saddler and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	Not included in agric. exports
43	Fur skins and artificial fur; manufactures thereof	4302
Section 11: Textiles and Textile Articles		
50	Silk	None
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	5105
52	Cotton	5203
53	Other vegetable textile fibers; paper yarn and woven fabrics of paper yarn	None

Chapters 54-63 of this section are not shown here since they are man-made fibers, textiles and apparels.

Note: A complete set of HS codes can be obtained from World Business Contact Centre, *HS Codes: Harmonization System Codes - Commodity Classification* (<http://www.hs-codes.com/>)