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LIVESTOCK, FISHERIES AND IRRIGATION
STATE DEPARTMENT FOR CROPS DEVELOPMENT

Kenya Climate Smart Agriculture Project
KENYA CLIMATE SMART AGRICULTURE PROJECT (KCSAP)

MONITORING AND EVALUATION

VERSION 1

2018
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PREFACE

KCSAP is designed on a solid monitoring, learning, and evaluation system that supports evidence-based decision-making and reinforces the culture of results-based project M&E. The latter is a web-based M&E and MIS system destined to monitor activities, processes, inputs, and outputs to track achievements against targets. Rigorous, quantitative impact evaluations will be undertaken to measure the final outcome (transformational impacts) at the mid-term review and end of the project. In view of this, the monitoring and evaluation manual is intended to give strategic and technical guidance to the monitoring and evaluation activities required for the implementation of the project. It guides on what needs to be done, how it will be done, timelines and responsibility. The key areas of focus include data collection, processing and information sharing with users and stakeholders on achievements, success stories and key learnings.

The manual gives guidelines on how to track the performance of the project outcomes which include: (i) Number of Beneficiaries disaggregated by gender. Monitorable indicators for this outcome are: (a) number of beneficiaries, (b) number of micro & subprojects completed and (c) number of service providers consortiums formed; (ii) Increase in productivity of selected agricultural commodities supported by the project whose indicator is the percentage increase in yield of selected commodities; and (iii) Number of beneficiaries adopting TIMPs promoted by the project whose indicator is the number of Beneficiaries (CIGs/VMGs) adopting at least one TIMP. The manual also gives guidelines on tracking performance of the respective intermediate outcomes, outputs, activities, processes and associates resources.

This manual also provides guidelines on the assessment of performance of the KCSAP initiatives in strengthening climate-smart agricultural research and seed systems (i.e. Climate-smart agricultural research and innovations, and Building competitive and sustainable seed systems). It also gives insight in assessing performance of Agro-weather, Market, Climate, and Advisory Services (Agro-meteorological Forecasting and Development of an Integrated Weather and Market Information System)

The Manual is effective from July, 2017 and copies will be availed to the County Project Coordinating Units (CPCUs) of the KCSAP.

Francis K. Muthami
National Project Coordinator- KCSAP

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ACRONYMS AND ABBREVIATIONS

AIU Agricultural Insurance Unit of the Ministry of Agriculture and Irrigation
ASAL Arid and semi-arid lands
AWPB annual work plan and budget
CAADP Comprehensive Africa Agriculture Development Program
CDDC Community driven development committee
CDDO Community driven development organisation
CFT Cool Farm Tool
CIG Common interest group
CIAP County integrated agriculture plan
CIDP County Integrated Development Plan
CL Component leader
CPCU County project coordination unit
CPMF Common performance measurement framework
CPSC County project steering committee
CSA Climate smart agriculture
CSAIP Climate smart agriculture investment plan
CSC Community scorecard
CTAC County technical advisory committee
CTD county technical department
CVCDC County Value chain Development Committees
DIME Development impact evaluation group of the World Bank
EACCCP East African Community Climate Change Policy
ESIA Environment and social impact assessment
ESMF Environmental and social management framework
GHG greenhouse gas
GoK Government of Kenya
IDA International Development Association
KALRO Kenya Agricultural and Livestock Organization
KCSAP Kenya Climate Smart Agriculture Project
KCSAS Kenya Climate-Smart Agriculture Strategy
KEPHIS Kenya Plant Health Inspectorate Service
KMD Kenya Meteorology Department
M&E Monitoring and evaluation
MIS Market information system
MOAI Ministry of Agriculture and Irrigation
NARS National agricultural research system
NEDI North-Eastern Development Initiative
NPC National project coordinator
NPCU National project coordination unit
NPSC National project steering committee
NTAC National technical advisory committee
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>PAD</td>
<td>Project Appraisal Document</td>
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<tr>
<td>PDO</td>
<td>Project development objective</td>
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<tr>
<td>PIM</td>
<td>Project implementation manual</td>
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<tr>
<td>PMIS</td>
<td>Project management information system</td>
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<td>PO</td>
<td>Producer organisation</td>
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<td>PPP</td>
<td>Public-private partnership</td>
</tr>
<tr>
<td>RC</td>
<td>Results chain</td>
</tr>
<tr>
<td>RCI</td>
<td>Resilience Capacity Index</td>
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<td>RIMA</td>
<td>Resilience Index Measurement and Analysis</td>
</tr>
<tr>
<td>SC</td>
<td>Sub-component</td>
</tr>
<tr>
<td>SDC</td>
<td>State Department for Crops</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SME</td>
<td>Small and medium enterprise</td>
</tr>
<tr>
<td>SP</td>
<td>Service provider</td>
</tr>
<tr>
<td>TIMPs</td>
<td>technologies, innovations and management practices</td>
</tr>
<tr>
<td>ToC</td>
<td>Theory of change</td>
</tr>
<tr>
<td>ToT</td>
<td>Training of trainers</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>VMG</td>
<td>Vulnerable and marginalized group</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
</tbody>
</table>
1. An Overview of KCSAP

1.1 General context

Agriculture is a major driver of the Kenyan economy and the dominant source of employment for about half of the population. The sector employs over 80 percent of the rural workforce and accounts for more than 20 percent of formal employment therefore playing a key role in poverty reduction. In 2016, agriculture, forestry and fishing sector contributed 32.6 percent to the national gross domestic product. Agriculture generates most of Kenya’s food requirements, nearly two-thirds (65 percent) of merchandise exports, and about 60 percent of foreign exchange earnings. However about 91 percent of the agricultural exports are in raw or semi-processed forms, leading to the country foregoing significant loss of the potential income.

The Kenya Vision 2030 recognizes the importance of transforming smallholder subsistence agriculture into an innovative, commercially oriented, and modern sector. It identifies the major challenges as low productivity, underutilized land, inefficient markets and limited value addition. Addressing these challenges is crucial in attaining Sustainable Development Goal (SDG) 1 that focuses on ending poverty and SDG 2 focusing on eradicating hunger in Kenya.

The Center for Global Development ranks Kenya 13th out of 233 countries for “direct risks” from “extreme weather and 71st for “overall vulnerability” to climate change (KCSAP PAD). The country is active in the international and regional dialogue on mainstreaming climate change into agricultural policies, plans and actions. As a Party to the United Nations Framework Convention on Climate Change (UNFCCC) Kenya has indicated its intention to reduce greenhouse gas (GHG) emissions, including reducing emissions from agriculture. Kenya is also implementing the Comprehensive Africa Agriculture Development Program (CAADP) Framework (2010) and the East African Community Climate Change Policy (EACCCP), Master plan and Strategy, which also informs Kenya’s National Climate Change Policy. At national level, the Kenya Climate-Change Act, 2016 envisions “a climate resilient and low carbon growth sustainable agriculture that ensures food security and contributes to the national development goal”. Further, Kenya Climate-Smart Agriculture Strategy (KCSAS, 2017-2026) provides framework for action on effects of climate change. The KCSAP project focuses on increasing agricultural productivity, enhancing resilience to impacts of climate change and reduction in GHG emissions, and thus is in line with national development, agriculture sector and climate change policies.
1.2 Objective and components of KCSAP

KCSAP’s Project Development Objective (PDO) is “to increase agricultural productivity and build resilience to climate change risks in the targeted smallholder farming and pastoral communities in Kenya, and in the event of an Eligible Crisis or Emergency, to provide immediate and effective response.”

The project has five components summarized below:

**Component 1: Up scaling Climate-Smart Agricultural Practices: (US$163.8 million equivalent, of which IDA US$150.0 million equivalent):** This component focuses on interventions that promote and facilitate the adoption of TIMPs to achieve the climate smart agriculture (CSA) triple-wins: increased productivity, enhanced resilience (adaptation) and reduced GHG emissions (mitigation) per unit of output, as co-benefits. It comprises of three subcomponents: (i) building institutional capacity and strengthening service delivery; (ii) supporting investments in smallholder agro-pastoral production systems; and (iii) supporting investments in pastoral extensive production systems. This component will be implemented under three components;

*Subcomponent 1.1: Building Institutional Capacity and Strengthening Service Delivery (IDA US$24.0 million equivalent):* Focuses on building institutional capacity at county, ward, and community levels to plan, implement, manage and monitor ward/county sub-projects and community micro-projects in all selected 24 counties.

*Subcomponent 1.2: Supporting Investments in Smallholder Agro-pastoral Production Systems (US$69.8 million equivalent, of which IDA US$63.0 million equivalent):* Supports climate-smart agriculture (CSA) investments in the form of community micro-projects, identified through the participatory processes, which help beneficiaries achieve the triple-wins (i.e. increased productivity; enhanced resilience; and reduced GHG emissions) in 17 counties located in semi-arid and medium-to-high potential (non-ASAL).

*Subcomponent 1.3: Supporting Investments in Pastoral Production Systems (US$69.5 million equivalent, of which IDA is US$63.0 million equivalent):* Supports the operationalization of the North-Eastern Development Initiative (NEDI) and will cover seven

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1 Semi-Arid Counties (West Pokot, Baringo, Laikipia, Machakos, Nyeri, Tharaka Nithi, Taita Taveta and Kajiado); and Non-ASAL Counties (Busia, Siaya, Nyandarua, Bomet, Kericho, Kakamega, Uasin Gishu, Elgeyo Marakwet, and Kisumu).
out of the eight NEDI² counties: Marsabit, Isiolo, Tana River, Garissa, Wajir, Mandera and Lamu.

**Component 2: Strengthening Climate-Smart Agricultural Research and Seed Systems (US$53.7 million equivalent, of which IDA US$50.0 million equivalent):** This component supports the development, validation and adoption of context-specific CSA TIMPs to target beneficiaries under Components 1 and 3; and also develop sustainable seed production and distribution systems. It comprises of three subcomponents: (i) supporting CSA research and innovations; (ii) building competitive and sustainable seed systems; and (iii) strengthening technical and institutional capacity to coordinate and deliver research and seed system outputs. The component will also strengthen technical and institutional capacity of Kenya Agricultural and Livestock Organization (KALRO) to deliver its mandate and GRIFTU Pastoral Training Institute to deliver training. This component will be implemented under three components:

*Subcomponent 2.1: Supporting Climate-Smart Agricultural Research and Innovations (US$30.9 million equivalent, of which IDA US$28.9 million equivalent):* Supports through a demand-driven approach, adaptive research approaches, the development, validation and dissemination of context-specific TIMPs that deliver CSA triple-wins.

*Subcomponent 2.2: Building Competitive and Sustainable Seed Systems (US$16.0 million equivalent, of which IDA US$14.3 million equivalent):* Supports crop, livestock and aquaculture breeding programs and promotes private sector and community involvement in production and distribution of commercial seed.

*Subcomponent 2.3: Strengthening Technical and Institutional Capacity (IDA US$6.8 million Equivalent):* Focuses on strengthening national agricultural research system (NARS) technical and institutional capacity to deliver CSA TIMPs; and also supports development of sustainable seed, breeding stock and fingerling delivery systems.

**Component 3: Supporting Agro-weather, Market, Climate and Advisory Services (US$32.9 million equivalent, of which IDA US$30.0 million equivalent):** This component supports development of agro-weather forecasting and marketing information system and their dissemination tools. The component has three subcomponents: (i) improving agro-

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² NEDI is a GoK special program that aims at supporting infrastructure (water, transport and off-grid energy) and agriculture development (especially the livestock sub-sector) in the marginalized counties of north and northeastern Kenya. Although Turkana is one of the NEDI counties it is not included under KCSAP mainly because it is under the National Agriculture and Rural Inclusive Growth Project (NARIGP) and the Regional Pastoral and Livelihood Resilient Project (RPLRP).
meteorological forecasting and monitoring; (ii) developing integrated weather and market information system and (iii) building technical and institutional capacity for agro-meteorological observation and forecasting, collection and analysis of agricultural statistics, and market advisory services. Climate information will be translated into actionable knowledge while agro-weather advisories disseminated towards improving producers’ long-term capacity for adopting CSA TIMPs, managing weather shocks and climate risks, and sustaining agricultural production under the changing climatic conditions. This component will be implemented under three components:

**Subcomponent 3.1: Improving Agro-meteorological Forecasting and Monitoring (US$16.5 million equivalent, of which IDA US$15.0 million equivalent):** Supports investments required towards: (i) enhancing agro-weather and climate information services; (ii) building core-capacity for agro-weather observation and forecasting; and (iii) developing long-term ability to operate and maintain agro-weather and climate information services.

**Subcomponent 3.2: Developing Integrated Weather and Market Information System (US$11.4 million equivalent, of which IDA US$10.0 million equivalent):** Focuses on activities related to: (i) developing “Big Data” for CSA; (ii) strengthening the Market Information Systems; and (iii) delivering integrated weather and market advisory services using ICT and existing agricultural extension networks.

**Subcomponent 3.3: Building Technical and Institutional Capacity (IDA US$5.0 million equivalent):** Focuses on building technical and institutional capacity of national and county governments to enable them to deliver on their Component 3 mandates.

**Component 4: Project Coordination and Management (US$29.3 million equivalent, of which IDA US$20.0 million equivalent):** This component supports activities related to national and county-level project coordination and management, including annual work planning and budgeting (AWPB); fiduciary aspects (financial management and procurement); human resource management; safeguards compliance monitoring; development and implementation of Management Information System (MIS) and information, communication technology (ICT)-based platforms; monitoring and evaluation (M&E) and impact evaluation studies; and communication strategy and citizen engagement. This component will be implemented under two components:

**Subcomponent 4.1: Project Coordination (US$24.8 million equivalent, of which IDA US$15.5 million equivalent):** Finances the costs of the national and county-level project coordination units (National Project Coordination Unit and County Project Coordination
Units) as well as operations and maintenance costs, such as office space rental charges, fuel and spare parts of vehicles, office equipment, furniture, and tools, among others. It will also finance the costs of project supervision and oversight provided by the Project Steering Committees (NPSC, NTAC and CPSCs), and any other project administration expenses.

**Subcomponent 4.2: Monitoring & Evaluation and Impact Evaluation (IDA US$4.5 million equivalent):** Finances activities related to routine M&E functions to include: data collection, analysis and reporting, development and operation of the ICT-based Agriculture Information platform for information sharing (such as technical and extension advisory services, business and market oriented, agro-weather information, stakeholders feedback, grievance and complaints among others), baseline, mid-point and end of project impact evaluations.

**Component 5: Contingency Emergency Response (US$0 million from IDA):** This zero-cost subcomponent will finance eligible expenditures related to emergency response mechanisms in case of natural or man-made, crises or disasters, severe economic shocks or other crises and emergencies. This contingency facility can be triggered through formal declaration of a national emergency by the government authority; and upon a formal request from GoK to the Bank through the National Treasury. In such cases, funds from an unallocated category or other project components will be reallocated to finance emergency response expenditures to meet agricultural crises and emergency needs.

**1.3 Theory of Change**

A Theory of Change describes a causal framework of how and why a change process will happen due to project interventions in the project context. KCSAP’s main development objectives are to increase agricultural productivity and build resilience to climate change risks in the targeted smallholder farming and pastoral communities in Kenya. As described in Section 1.2, a range of measures will be undertaken to achieve these objectives. These measures are all different components of an approach to climate-smart agriculture (CSA). Climate smart agriculture has three main aims:

- to increase productivity in environmentally sustainable ways;
- to increase the resilience of agriculture to the effects of climate change; and
- to reduce GHG emissions from agriculture.

Since CSA is a new concept, and concepts such as resilience are complex, Section 1.3.1 explains how the project proposes to achieve the three aims of CSA. Section 1.3.2 explains the approach to measurement of resilience, and Section 1.3.3 summarizes these linkages through the project’s theory of change.
1.3.1 ‘Triple wins’ of CSA

Increasing productivity of agriculture (e.g. yield per unit area, or yield per animal) has long been a focus of agriculture development projects. KCSAP will increase productivity by promoting the adoption of agricultural technologies, innovations and management practices (TIMPs) through provision of advisory services, encouraging farmer groups to engage in savings and credit activities to support investment in agriculture, and by strengthening market linkages, including linkages to both input markets and product (output) markets.

Low-productivity agricultural production may have a high environmental impact. For example, when soils are poorly managed, soil erosion and land degradation can occur. As soils degrade, soil carbon is lost to the atmosphere, increasing the greenhouse effect that causes climate change. If crop residues are burned instead of being incorporated into soils, not only are GHGs emitted to the atmosphere, but on-farm resources that could be used to improve nutrient cycling and maintain soil fertility are used inefficiently. In livestock production, low productivity means that the feed energy consumed by livestock is not efficiently used to produce livestock products, but a greater proportion of energy intake is used to maintain the animal’s survival. Under more productive practices, total GHG emissions may increase (e.g. if nitrogen fertilizers or specialized dairy cattle breeds are used), but GHG emissions may decrease per unit of output. Therefore, improving agricultural production practices can not only increase productivity, but also reduce the environmental cost of agricultural production.

Increased productivity can also have benefits for the resilience of agricultural systems and smallholder farmers. Resilience is “the capacity of a household to bounce back to a previous level of well-being (for instance food security) after a shock”. Different types of capacities are relevant, so resilience is multi-dimensional. Some farmers may be better able to cope with the effects of climate risks, such as drought, because they have assets that are easily converted into cash and easily replaced (e.g. chickens, small stock). Other farmers may mainly cope with climate shocks by relying on mutual support between family members and neighbours. Together, a household’s assets, social networks, access to basic services and the ability to adapt to changing situations are four key pillars of resilience.

There are four main pathways through which KCSAP’s interventions could increase farmers’ and pastoralists’ resilience:

(1) Incomes, assets and consumption: Increased productivity, when combined with sales to remunerative markets and control of production costs can increase producers’ incomes.

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KCSAP will also support members of producer groups to engage in savings and credit activities. Income and credit can be converted into assets or used to support household consumption. This may enable households to reduce the need to sell assets or assist in maintaining consumption when shocks occur.

(2) Sensitivity to climate risks: Many climate smart agriculture practices can help reduce the effects of weather events on agricultural production. For example, improved soil management methods (e.g. maintaining vegetative cover, application of compost or manure, reduced tillage) can increase the ability of soils to retain moisture. This can make crops less sensitive to short-term rainfall deficits.

(3) Reduced exposure to climate risks: KCSAP will support smallholders to form producer groups to engage in market-oriented agricultural production. While common crops (e.g. maize) and livestock (e.g. cattle) are often exposed to the effects of variations in weather, engaging in new value chains (e.g. bee keeping) may increase the diversity of household income sources, and these new income or food sources may not be affected by the same climate risks as existing crops. This can reduce the exposure of a household to the effects of some weather events when they happen, although new enterprises may be exposed to different risks.

(4) Increased adaptive capacity: Being able to draw on social networks is important for coping with climate shocks. KCSAP will support smallholder farmers and pastoralists to join common interest groups (CIGs), vulnerable and marginalized groups (VMGs) and other producer organisations. These organisations provide a platform for stronger cooperation between households. The project will also strengthen their linkages with providers of information, advisory services, production inputs and markets. This can increase the social resources that households are able to draw on in time of need.

### 1.3.2 Measurement of resilience in KCSAP

There are many definitions of resilience. KCSAP will follow the definition used in the FAO Resilience Index Measurement and Analysis (RIMA) methodology: “The capacity of a household to bounce back to a previous level of well-being (for instance food security) after a shock”. The RIMA-II methodology has been tried and tested in Kenya, and has a proven ability not only to track measurable change in resilience at household level, but also to provide analytical results that can inform both project interventions and policy. The

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4 FAO 2016a RIMA-II
5 FAO 2016b, Resilience Analysis in Isiolo, Marsabit and Meru. [http://www.fao.org/3/a-i6892e.pdf](http://www.fao.org/3/a-i6892e.pdf)
methodology has been mandated by the African Union as the methodology to use for measuring resilience for reporting on progress in implementing the Malabo Declaration.6

The RIMA methodology measures 18 variables grouped in four categories that reflect resilience at the household level. The four categories, or ‘pillars of resilience’, are shown in Table 1. The RIMA-II analysis methodology weights and combines the individual variables into one composite indicator of resilience: the Resilience Capacity Index (RCI). Not all projects will directly impact on all aspects of resilience. Those aspects where KCSAP is expected to have direct impacts have been highlighted in bold in Table 1. KCSAP can be expected to have direct impacts on indicators comprising the RCI in the following aspects:

- **Access to Basic Services**: Distance to nearest source of credit;
- **Social Networks**: participation in associations; value of credit per capita
- **Adaptive Capacity**: Number of income-generating activities; Number of crops; Participation in training

Direct effects on **assets and food security** are not expected, but indirect effects on these pillars and on other variables are likely due to the decisions made by beneficiary household members.

Resilience will be measured using the RIMA-II methodology at baseline and final evaluation. Some of the RCI variables directly affected by the project are not included in the project’s results framework. Key indicators comprising the RCI that are expected to be directly affected by project interventions will also be tracked in the M&E system alongside other results framework indicators.

RIMA-II is a measure of household resilience that reflects the multi-dimensional nature of resilience. However, considering the specific design of KCSAP, detecting and tracking the effects of project interventions on agro-pastoralist and pastoralist resilience requires additional monitoring of two aspects:

1. **RIMA-II is a practical methodology that can be implemented through household surveys.**

   It does not, however, include any direct indicators of change in **ecological resilience** due to project activities. Many of the TIMPs promoted by the project can be expected to increase the ecological resilience of farming or grazing systems, e.g. by increasing soil moisture retention, reducing soil erosion, or improving soil chemical and physical structure. The effects of TIMPs on ecological resilience will be one of the topics assessed through research undertaken as part of Component 2.1 of KCSAP.

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6 Africa Agriculture Transformation Scorecard.
(2) The RCI is a measure of household capacity to adapt to shocks. Some types of social networks that support household resilience are incorporated in the index. However, many of KCSAP’s interventions focus on strengthening the institutional systems that deliver support to households, e.g. capacities of county governments to provide extension services; capacities of agricultural research institutes to conduct relevant research on CSA topics; and capacities of actors in the seed system. Changes in these systems and their abilities to respond to farmers’ needs are not captured in the RIMA-II RCI. Therefore, monitoring of system capacities will be conducted in KCSAP to supplement the household-focused RIMA-II methodology.
Table 1: Indicators of resilience in the RIMA-II methodology (variables expected to be directly affected by KCSAP interventions are in bold)

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to Basic Services:</strong></td>
<td>Improved sanitation</td>
<td>Variable indicating access to improved toilet facility (covered pit latrine private, private ventilated improved pit latrine, and private flush toilet).</td>
</tr>
<tr>
<td></td>
<td>Improved water</td>
<td>Variable indicating access to an improved water source (piped dwelling, piped public tap, protected shallow well, borehole, protected spring, roof rain water).</td>
</tr>
<tr>
<td></td>
<td>Closeness to primary school</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td></td>
<td>Closeness to hospital (public/private)</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td></td>
<td>Closeness to health facility (public/private)</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td></td>
<td>Closeness to livestock market</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td></td>
<td>Closeness to agricultural market</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td></td>
<td>Closeness to petty trading market</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td></td>
<td>Closeness to county administrative unit</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td></td>
<td><strong>Closeness to financial service</strong></td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td><strong>Assets:</strong></td>
<td>Wealth index</td>
<td>The wealth index indicating whether or not a household has specific non-productive assets, e.g. radio, lamp, mobile, bicycle, table, chairs, bed, hand mill, mattress, solar panel, water tank or jerry cans.</td>
</tr>
<tr>
<td></td>
<td>Agricultural asset index</td>
<td>The agricultural asset index indicating whether or not a household has specific productive assets, such as an axe, plough, hoe, sickle, rake, cart, ox plough and other assets.</td>
</tr>
<tr>
<td></td>
<td>TLU per capita</td>
<td>TLU standardizes different types of livestock into a single unit of measurement</td>
</tr>
<tr>
<td></td>
<td>Land per capita</td>
<td>Total area (acres) employed for crop production.</td>
</tr>
<tr>
<td><strong>Social networks:</strong></td>
<td>Participation in associations</td>
<td>Index indicating whether a household participates in various types of association.</td>
</tr>
<tr>
<td>Capacity of the household to access formal and informal assistance from institutions, as well as from relatives and friends.</td>
<td>Credit (value) per capita</td>
<td>Total amount (USD) of loans received in the last month.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Past credit (value) per capita</td>
<td>Total amount (USD) of loans contracted before the last month.</td>
<td></td>
</tr>
<tr>
<td>Formal transfers (value) per capita</td>
<td>Total amount (USD) of formal transfers received in the last month (incl. cash for work programs, relief food from NGOs etc.)</td>
<td></td>
</tr>
<tr>
<td>Informal transfers (value) per capita</td>
<td>Total amount (USD) of informal transfers received in the last month (incl. help in cash and in kind from family members and in-laws, remittances, gifts and borrowing from friends and relatives).</td>
<td></td>
</tr>
</tbody>
</table>

| Adaptive capacity: Ability to adapt to a new situation and develop new livelihood strategies | Average years of education | Average years of education of household members. |
| Share of active members | The dependency ratio is the share of household members actively employed (>15 and <64 years old) over the household size. |
| CSI | The CSI is a weighted sum of the number of days the household adopted different strategies to cope with food shortage in the past week. The strategies are weighted as a figure of 1-4 (according to focus group discussions implemented). |
| Number of income-generating activities | Sum of the different sources of income for the household (incl. farming; wage employment; sale of livestock products; non-farm enterprise; transfers; rent; sale of assets or other income sources. |
| Number of crops | Sum of the different crops cultivated by the household during the last season. |
| Participation in training | Dummy variable for participating in trainings (on agricultural techniques, livestock and products, business skills, and others. |

| Food Security | Food consumption per capita | Monetary value (USD) of per capita food consumption, including bought, auto-produced, received for free (as gifts or part of a conditional project) and stored food of the last month. |
| Household Dietary Diversity | | |
| Caloric intake | Check module from sample questionnaire shared |
| FCS | Score calculated using the frequency of consumption of different food groups consumed by the household during the 7 days before the survey. The weights are standard and can be employed in all analyses (WFP, 2008). |
1.3.3 KCSAP Theory of Change

Figure 1 summarizes the theory of change underlying the project. KCSAP’s objectives are increased productivity and resilience of agro-pastoral and pastoral production systems, and reduced GHG intensity of agricultural production. These objectives will be met through different pathways. Many of the project’s interventions aim to support adoption of context-specific TIMPs. In the context of a variable and changing climate, the TIMPs will increase productivity. By using resources more efficiently, the GHG emissions per unit of output will decrease. TIMPs will increase productivity, and with remunerative marketing this will increase household incomes and assets, which will reduce vulnerability to shocks. TIMPs will also reduce the sensitivity of agricultural production to climate variability, thus reducing vulnerability. Adoption of TIMPs and diversification of production may also reduce exposure to climate risks. Organising farmers and pastoralists into producer organisations and strengthening linkages with other supporting institutions will increase adaptive capacity, thus reducing vulnerability. The overall effect on household resilience will also depend on other factors not directly influenced by the project. How the project will monitor and evaluate whether these causal linkages assumed are in fact happening is described in detail in Chapters 4-7 of this manual.

Figure 1: KCSAP theory of change
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1.4 Who are the beneficiaries and what are the target areas

The project interventions will be concentrated in 24 selected counties in arid, semi-arid and medium-to-high rainfall areas in Kenya (Table 2). Each county will select four to six wards in up to three sub-counties using the following criteria: (i) poverty level of ward; (ii) vulnerability to climate risks; (iii) presence of priority value chains; (iv) geographic proximity and contiguity of wards; (v) absence of similar initiatives to avoid duplication; and (vi) presence of ward-level technical department officials.

The direct beneficiaries of the project are estimated at about 521,500 households of smallholder farmers, agro-pastoralists, and pastoralists. These beneficiaries include members of Common Interest Groups (CIGs) and Vulnerable and Marginalized Groups (VMGs), and participants in public-private partnership (PPP) that are recipients of grants, as well as beneficiaries of landscape-level investments implemented by counties. Of these, 163,350 represent households organized into about 4,950 CIGs and 18,150 represent households organized into 1,100 VMGs, who will benefit from community CSA micro-project investments. About 240,000 households will benefit from the county-level investment sub-projects, and 100,000 will benefit from PPP investment subprojects. More than 600 micro, small- and-medium enterprises will also benefit directly from project interventions.
Table 2: Project counties

<table>
<thead>
<tr>
<th>Arid Counties</th>
<th>Semi-Arid Counties</th>
<th>Non-ASAL Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marsabit</td>
<td>West Pokot</td>
<td>Busia</td>
</tr>
<tr>
<td>Isiolo</td>
<td>Baringo</td>
<td>Siaya</td>
</tr>
<tr>
<td>Tana River</td>
<td>Laikipia</td>
<td>Nyandarua</td>
</tr>
<tr>
<td>Garissa</td>
<td>Nyeri</td>
<td>Bomet</td>
</tr>
<tr>
<td>Wajir</td>
<td>Tharaka Nithi</td>
<td>Kericho</td>
</tr>
<tr>
<td>Mandera</td>
<td>Lamu</td>
<td>Kakamega</td>
</tr>
<tr>
<td></td>
<td>TaitaTaveta</td>
<td>UasinGishu</td>
</tr>
<tr>
<td></td>
<td>Kajiado</td>
<td>Elgeyo Marakwet</td>
</tr>
<tr>
<td></td>
<td>Machakos</td>
<td>Kisumu</td>
</tr>
</tbody>
</table>
1.5 KCSAP Implementation arrangements

Implementation of KCSAP will involve a three-tiered institutional arrangement (national, county, and community) (Figure 2). At the national level, the National Treasury will represent the Government of the Republic of Kenya (“the Borrower”) and the Ministry of Agriculture and Irrigation (MOAI) will be the main implementing agency. Within MOAI, the project will be anchored in the State Department for Crops (SDC). There will be a steering committee at the national level (NPSC) to provide overall oversight and guidance on governance and policy. Technical support will be provided by national technical advisory committee (NTAC). The role of day-to-day implementation of the project at the national level will be executed by National Project Coordination Unit (NPCU) headed by the National Project Coordinator (NPC). The NPCU is also staffed with leaders of project Components 1, 2 and 3, an M&E officer, a safeguards officer and a communications officer. Components 2 and 3 are largely implemented in collaboration with national agencies (e.g. KALRO, NARS, KMD). Component 1 involves capacity building support to county project institutions, and the NPSC and NTAC will be responsible for approval of county, cross-county and PPP sub-projects. Other activities in Component 1 will be implemented by county project agencies.
At the county level there will be a County Project Steering Committee (CPSC) to provide overall implementation oversight and will be responsible for approving the project’s annual work plans and budgets (AWP&Bs) at county level, as well as ward and community project proposals. They will also ensure that project activities and community micro-projects are incorporated into the counties respective annual plans (CAPs) and County Integrated Development Plans (CIDP). The CPSC comprises of Chief Officers from relevant county ministries, the County Director National Environment Management Authority (NEMA), County Director KMD and representatives from the private sector and civil society. Technical support will be provided by county technical advisory committees (CTACs) comprised of Directors of the county technical departments (CTDs). The role of day-to-day implementation of the project at the county level will be executed by County Project Coordination Units (CPCUs). The unit will have a County Project Coordinator, Agriculture Statistics Officer, County M&E Assistant and other support staff.

At the community level, CIGs/VMGs and other producer organisations will be formed. Within each ward, a CDDC will be elected from among the community-based organisations. At county level, a county driven development organization (CDDO) will be elected from among the CDDCs. The CDDCs and CDDOs will have procurement and social accountability and integrity sub-committees to oversee procurement and to monitor implementation of the sub-projects. Community-based organisations (CBOs) will also elect ward enterprise committees, and at county level will form County Value chain Development Committees (CVCDC). The CVCDCs will manage service provision by contracted Service Providers.
2. Introduction to some basic concepts of M&E

2.1 Purpose of M&E

Monitoring and Evaluation (M&E) is an essential activity in results-based management. M&E activities will enable the KCSAP management teams at national and county levels to clearly demonstrate to the key stakeholders whether the project is achieving the stated objectives, outcomes and outputs within the planned resources and timeframe. Therefore, the M&E system provides the means to:

- monitor the project results indicators as reflected in the Results Measurement Framework;
- comprehensively track implementation of the Annual Work Plan and Budget (the project inputs, activities and outputs), using mainly the set of indicators (or milestones) outlined under each project component;
- Establish a process to alert implementers, stakeholders and KCSAP managers to any problems in project implementation to inform decisions about any necessary adjustments.

In addition, M&E can serve other information needs of project stakeholders, including:

- learning lessons from project experiences to inform future interventions; and
- strengthening accountability of implementation agencies and community organisations to stakeholders through transparent disclosure of information.

2.2 Key Definitions

Based on the particular context of KCSAP, this section explains what is meant by monitoring, evaluation, impact evaluation, results-based management and other key terms used in this manual.

2.2.1 Monitoring and evaluation

Monitoring and evaluation are complementary but different (Table 3).

Monitoring is the collection, analysis and systematic use of information / data to support project management and decision-making. Monitoring enables project managers to determine whether the implementation of activities is going in the right direction at the right pace. It provides key stakeholders of a project with the information needed to:

(i) monitor the allocation and use of resources (physical, material, financial);
(ii) assess the progress (inputs, activities, milestones) and achievements (outputs, outcomes) made;
(iii) detect any deviations from expected or planned progress and achievements recorded during implementation; and
(iv) support decision making about any corrective actions (e.g. changes in implementation methods, reallocation of funds etc) in a timely way.

There are thus two aspects to monitoring: **process monitoring**, which largely focuses on comparing planned to actual inputs and activities using the AWPB, and **results monitoring**, which monitors the results framework indicators. From another perspective, monitoring is also divided into **internal** and **external** monitoring. Regular monitoring of project process and results conducted by project implementation agencies is internal monitoring. Regular supervision missions and mid-term review activities involving World Bank and other external stakeholders or experts are external monitoring activities.

**Evaluation** is the measure, as systematic and objective as possible, of the results of a project, program or policy, to determine its relevance and coherence, the efficiency of its implementation, its effectiveness and impact and the sustainability of the outcomes obtained in respect of the objectives. Thus, evaluation is used to assess the **efficiency, effectiveness, impact, relevance and sustainability** of projects. **Impact evaluation** is a particular type of evaluation in which evidence about what works and why is generated by studying the effectiveness of packages of interventions (i.e. “what”) and experimenting with mechanisms (i.e. “why” and “how”) to better understand what determines the impacts achieved.

**Table 3: Differences between monitoring and evaluation**

<table>
<thead>
<tr>
<th>MONITORING</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question</strong>: Is the project implementing activities effectively?</td>
<td><strong>Question</strong>: Is the project achieving the expected outcomes and impacts?</td>
</tr>
<tr>
<td>• Regular / continuous data collection</td>
<td>• Occasional data collection for impact assessment</td>
</tr>
<tr>
<td>• Tracking implementation of the AWPB (Process Monitoring)</td>
<td>• In depth data analysis of survey data or special studies</td>
</tr>
<tr>
<td>• Tracking of results indicators of the results measurement framework (Results Monitoring)</td>
<td></td>
</tr>
<tr>
<td>• Measurement of effectiveness (planned vs achieved)</td>
<td>• Measurement of outcome and impact (Impact evaluation / assessment)</td>
</tr>
</tbody>
</table>
2.2.2 Indicators, outputs, outcomes and objectives

Elaboration of a project’s theory of change (ToC) is emerging as good practice in the preparation of investment projects. A ToC maps out the logic of a project. It begins with the desired long-term goals, and then works back from the goals to identify all the conditions (outcomes, outputs, activities) that must be in place (and how these relate to one another causally) for the goals to be achieved. In other words, a ToC describes a causal framework of how and why a change process will happen in a particular context.

In the preparation of this M&E manual, a theory of change underlying the KCSAP intervention logic has been mapped out. This theory of change is then used to identify measurable indicators of the longer-term objectives, outcomes and outputs that the project needs to achieve. Compared to the project results framework in the PAD (Annex A), this M&E manual identifies indicators of objectives, outcomes and outputs in a slightly different way.

**Indicators** are the information used to identify change, such as whether outputs or outcomes have occurred. In order to clearly identify whether change has happened or not, indicators need to have precise definitions, clear units of measurement and protocols for data collection so that the information is reliable, consistent and comparable.

**Outputs** refer to the direct products of project activities. For example, the delivery of training, infrastructure and equipment, information systems, policies or regulations. The number of direct project beneficiaries is also considered a direct outcome of the provision of goods and services by the project.\(^7\)

**Outcomes** refer to changes in the behaviour of stakeholders due to the use of project outputs. Because of the complexity of the causal chains in KCSAP, we distinguish between:

**Immediate outcomes** are changes in behaviour of farmers and other stakeholders due to project outputs that occur within the project lifetime. For example, the area of land brought under climate-smart management is an indicator of the immediate outcomes due to successful implementation of micro-projects and sub-projects (where successful implementation is an outcome of micro- and sub-project activities).

**Intermediate outcomes** reflect a desired development change. Intermediate outcomes are most often changing due to the achievement of one or more immediate outcome. For example, strengthened agricultural research capacities together with increased production of climate smart seed inputs (which are both immediate outcomes) lead to improved functional performance of the research, extension and input supply system (i.e. a desired development change).

**Project Development Outcomes** in this manual refers to the higher-level results measures of the stated project development objectives (i.e., PDO in the PAD).

\(^7\) This contrasts with the PAD results framework, where number of beneficiaries is a PDO indicator.
This M&E manual describes the rational and procedures for M&E of all the indicators in the PAD results framework. However, by further defining causal linkages throughout the project's theory of change and results indicators consistent with the above definitions, the presentation of the logic of the KCSAP interventions in this manual becomes more detailed and more operational than what can be presented in a PAD. The clearly presented intervention logic helps users of monitoring information to track progress and intermediate results more quickly and to take corrective action in a more timely way. It also enriches the evaluation of results through strengthening the evidence-base.

2.3 Main components of M&E systems
The KCSAP M&E system has four main functions:

(i) **Activity planning**: Preparation of AWPBs.

(ii) **Implementation progress monitoring**: Monitoring of AWPBs, monitoring implementation of activities and milestones listed in sub-component implementation plans.

(iii) **Results indicator monitoring and measurement**: Monitoring and measuring changes of all results framework indicators (i.e., outputs, intermediate outcomes and development outcomes).

(iv) **Results Review**: mid-term and implementation completion review.

(v) **Impact evaluation**: goes beyond results measurement, and seeks to understand the role of the intervention in producing these (causal attribution).

AWPBs will be prepared at county and national level. **Implementation monitoring** will:

- develop and maintain the dashboard of the project progress, which can be viewed by center of responsibility or executing agency (e.g. CPCU, Component);
- establish the rate of physical and financial implementation of project activities;
- Explain the discrepancies and propose timely corrective measures.

**Results indicator monitoring and measurement** will be based on the Results Measurement Framework (RMF) and produce dashboard(s) for tracking results indicators. A project performance dashboard will provide easy access to key indicators (i.e. PAD results framework indicators and any other results framework indicators that NPCU management identifies as critical for informing timely management decisions).

**Results reviews** will assess the changes brought about by project interventions on outcome indicators (e.g. project beneficiary agricultural productivity, resilience, GHG emission intensity).

Impacts are usually understood to occur later than, and as a result of, intermediate outcomes. The distinction between outcomes and impacts can be relative, and depends on the stated objectives of an intervention. It should also be noted that some impacts may be emergent, and thus, cannot be predicted. An impact evaluation provides information about the impacts produced by an intervention - positive and negative, intended and unintended, direct and indirect. This means that an impact evaluation must establish what has been the cause of observed long-term changes to livelihoods, referred to as causal attribution (also referred to as causal inference). Impact evaluations would be undertaken if there is scope to use the findings to inform decisions about future interventions.
In order to enable these key M&E functions, the M&E system has the following four interrelated elements:

(i) **Actors**: who will use the M&E data? To make what decisions? and who would provide this information? Stakeholders’ information needs are described in Section 3.2, and roles and responsibilities in meeting those needs are described in Section 7.1.

(ii) **Data**: What are the information needs? and what data will therefore have to be collected? The indicators are described in Annex B and Annex C, and the rationale for choosing them is explained in Section 4.

(iii) **Procedures**: Who does what and when, so that information is collected, entered into the system database, processed and disseminated to the right actor? How to organize the collection of data to avoid duplication and inconsistencies that could complicate the treatment and analysis? Procedures for collection of M&E data are described in Sections 5 and 6, and procedures for ensuring that M&E supports learning by project implementers and stakeholders are described in Section 7.3.

(iv) **Tools**: which tools are needed to implement the procedures? Templates for data collection and reporting are provided in Annex D. The functions required of the project management information system (PMIS) in order to enable data reporting and analysis are described in Section 7.2.
3 Purpose of this M&E Manual

3.1 Objectives of this manual

This M&E Manual is developed as part of the implementation of KCSAP. It is intended to serve as a reference and a guide to staff at various levels directly involved in the monitoring and evaluation of the project:

(i) at national level, in particular NPCU Coordinator, M&E Officer and project component leaders; and

(ii) at county level, in particular CPCU Coordinators, M&E officer and others staff involved in M&E activities.

This M&E Manual presents concepts, processes and tools to help structure the plan for collecting, analysing and disseminating information on the progress of the project towards its expected outcomes, as well as the operational monitoring of activities defined in the AWPBs. Thus, it establishes the roles and responsibilities of the staff both at national and county levels in terms of production and / or supply of data, and the reporting and use of M&E data.

This M&E Manual is drafted in the initial stages of project implementation, during which some modalities and procedures for project implementation are still being developed. Therefore, the M&E manual should be seen as a ‘living draft’, to be updated and revised as the NPCU deems necessary. In particular, two reviews of the M&E system are envisaged: one towards the end of the first year of project implementation, and one at mid-term review. These reviews provide formal opportunities to improve and (if required) revise M&E procedures in line with the objectives of the M&E system explained in Section 2.1 above.

3.2 The main users of M&E and their information needs

The stakeholders in the KCSAP M&E system can be divided into four categories:

(i) national external stakeholders (i.e. related government agencies)
(ii) national project agencies (i.e. NPSC, NTAC, NPCU)
(iii) county project agencies (i.e. CPSC, CTAC, CPCU), and
(iv) community stakeholders (i.e. project beneficiaries and non-beneficiaries).

Table 4 below presents the KCSAP stakeholders, their roles/responsibilities and their information needs. The KCSAP M&E system has been designed to meet the information needs of each stakeholder in order to support their decision-making processes and increase the accountability of the project to stakeholders at each level. The M&E procedures set out in this manual are designed based on the roles, responsibilities and needs of each stakeholder group.
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### M&E procedures

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### Table 4: KCSAP stakeholders, roles and information needs

<table>
<thead>
<tr>
<th>ACTORS/STAKEHOLDERS</th>
<th>ROLES / RESPONSIBILITIES</th>
<th>INFORMATION NEEDS</th>
<th>Monitoring report, document/Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NATIONAL EXTERNAL STAKEHOLDERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministry of Agriculture and Irrigation</td>
<td>• Formulation of legislation and policies on agriculture</td>
<td>• Learning lessons for policy and programming</td>
<td>• Project annual report</td>
</tr>
<tr>
<td></td>
<td>• Development and implementation of sector programmes</td>
<td>• Meeting national (ASDS, NIMES) and international (AU CAADP Scorecard) reporting obligations</td>
<td>• Mid-term review, final evaluation, impact evaluation and special study reports</td>
</tr>
<tr>
<td></td>
<td>• Managing information on the sector</td>
<td></td>
<td>• Project M&amp;E dashboard</td>
</tr>
<tr>
<td>Ministry of Environment and Forestry</td>
<td>• Formulation of legislation and policies on climate change</td>
<td>• Learning lessons for policy and programming</td>
<td>• Project annual report</td>
</tr>
<tr>
<td></td>
<td>• International reporting on climate change mitigation and adaptation</td>
<td>• Meeting international reporting obligations (UNFCCC)</td>
<td>• Mid-term review, final evaluation, impact evaluation and special study reports</td>
</tr>
<tr>
<td><strong>NATIONAL PROJECT STAKEHOLDERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Project Steering Committee (NPSC)</td>
<td>• Oversight &amp; guidance on governance and policy</td>
<td>• Progress of implementation at national and county levels</td>
<td>• Project semi-annual and annual progress reports</td>
</tr>
<tr>
<td></td>
<td>• Ensure alignment with Vision 2030, ASDS, Financing Agreement</td>
<td>• Project performance against targets</td>
<td>• National management dashboard</td>
</tr>
<tr>
<td></td>
<td>• Review and approve AWPBs presented by NPCU</td>
<td>• Annual Work Plan and Budget</td>
<td>• Draft national AWPB</td>
</tr>
<tr>
<td></td>
<td>• Review and approve semi-annual and annual progress and financial reports</td>
<td></td>
<td>• Mid-term review report</td>
</tr>
<tr>
<td>National Technical Advisory Committee (NTAC)</td>
<td>• Review of project AWPBs</td>
<td>• AWBP</td>
<td>Draft AWPB</td>
</tr>
<tr>
<td></td>
<td>• Review and approval of quarterly progress and financial reports</td>
<td>• Progress of implementation at national and county levels</td>
<td>• National management dashboard</td>
</tr>
<tr>
<td></td>
<td>• Participate in project implementation support missions</td>
<td>• Project performance against targets</td>
<td>• Project quarterly, semi-annual and annual progress reports</td>
</tr>
<tr>
<td></td>
<td>• Review and approve proposals for county sub-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**KCSAP** Kenya Climate-Smart Agriculture Project
| Financial and technical Partners World Bank, SDC | National Project Coordination Unit (NPCU) |  
|---|---|---
| • Supervise and monitor the implementation of the project  
• Manage disbursement  
• Control of procedures (financial management, procurement, etc.)  
• Approve AWPBs  
• Supervise project implementation | • Day-to-day coordination and management  
• Lead preparation of AWPBs and procurement plans  
• Ensure effective utilization of funds in accordance with AWPBs and procurement plan through supervision missions, monitoring AWPB implementation and semi-annual review  
• Review of strategies and retooling to ensure effective implementation  
• Ensure timely submission of progress, audit and other reports  
• Ensure compliance to WB/GoK guidelines  
• Ensure timely | • Performance against targeted results indicators  
• Success stories and lessons learned  
• Implementation rates (physical and financial rates) of AWPBs  
• Problems encountered in project implementation  
• Problems in coordination and M&E activities  
• Financial management and procurement issues (disbursements, etc.).  
• Effectiveness of environmental and social safeguards  
• Proposed solutions to problems  
• Overall disbursement rates, including matching funds  
• Draft AWPBs  
• Project quarterly, semi-annual and annual reports  
• National project dashboard  
• Impact Evaluation and special study reports |
| • Performance against targeted results indicators  
• Success stories and lessons learned  
• Implementation rates (physical and financial rates) of AWPBs  
• Problems encountered in project implementation  
• Problems in coordination and M&E activities  
• Financial management and procurement issues (disbursements, etc.).  
• Effectiveness of environmental and social safeguards  
• Proposed solutions to problems  
• Overall disbursement rates, including matching funds  
• Draft AWPBs  
• Project quarterly, semi-annual and annual reports  
• National project dashboard  
• Mid-term review report  
• Impact evaluation and special study reports | • Performance against targeted results indicators; data quality  
• Draft national and county AWPBs  
• Implementation rates (physical and financial rates) of the AWPB  
• Financial management and procurement issues (disbursements, etc.).  
• Effectiveness of environmental and social safeguards  
• Problems encountered in implementation  
• Grievances; proposed solutions to problems  
• Success stories and lessons learned | • Performance against targeted results indicators; data quality  
• Draft national and county AWPBs  
• Implementation rates (physical and financial rates) of the AWPB  
• Financial management and procurement issues (disbursements, etc.).  
• Effectiveness of environmental and social safeguards  
• Problems encountered in implementation  
• Grievances; proposed solutions to problems  
• Success stories and lessons learned |
<table>
<thead>
<tr>
<th>COUNTY PROJECT STAKEHOLDERS</th>
<th>COUNTY PROJECT STAKEHOLDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project implementation oversight</td>
<td>Project implementation oversight</td>
</tr>
<tr>
<td>Approve AWPBs at county level</td>
<td>Approve AWPBs at county level</td>
</tr>
<tr>
<td>Approve ward and community project proposals</td>
<td>Approve ward and community project proposals</td>
</tr>
<tr>
<td>Incorporate project activities in county plans</td>
<td>Incorporate project activities in county plans</td>
</tr>
<tr>
<td>Monitor implementation progress</td>
<td>Monitor implementation progress</td>
</tr>
<tr>
<td>Undertake quality assurance of service delivery</td>
<td>Undertake quality assurance of service delivery</td>
</tr>
<tr>
<td>Ensure effective and efficient use of project resources</td>
<td>Ensure effective and efficient use of project resources</td>
</tr>
<tr>
<td>Progress of implementation at county level</td>
<td>Progress of implementation at county level</td>
</tr>
<tr>
<td>Project performance against targets</td>
<td>Project performance against targets</td>
</tr>
<tr>
<td>AWPB with recommendations from CTAC</td>
<td>AWPB with recommendations from CTAC</td>
</tr>
<tr>
<td>Progress of implementation at county level</td>
<td>Progress of implementation at county level</td>
</tr>
<tr>
<td>Implementation rates (physical and financial rates) of the AWPB</td>
<td>Implementation rates (physical and financial rates) of the AWPB</td>
</tr>
<tr>
<td>Problems encountered in implementation at county level</td>
<td>Problems encountered in implementation at county level</td>
</tr>
<tr>
<td>Feedback on quality of service delivery</td>
<td>Feedback on quality of service delivery</td>
</tr>
<tr>
<td>Proposed solutions to problems</td>
<td>Proposed solutions to problems</td>
</tr>
<tr>
<td>Success stories and lessons learned</td>
<td>Success stories and lessons learned</td>
</tr>
<tr>
<td>Project semi-annual and annual progress reports</td>
<td>Project semi-annual and annual progress reports</td>
</tr>
<tr>
<td>Quarterly, semi-annual and annual progress reports</td>
<td>Quarterly, semi-annual and annual progress reports</td>
</tr>
<tr>
<td>County AWPB</td>
<td>County AWPB</td>
</tr>
<tr>
<td>County performance dashboard</td>
<td>County performance dashboard</td>
</tr>
<tr>
<td>Technical support to project implementation</td>
<td>Technical support to project implementation</td>
</tr>
<tr>
<td>Approve county level investments</td>
<td>Approve county level investments</td>
</tr>
<tr>
<td>Lead CSA planning and county and ward level</td>
<td>Lead CSA planning and county and ward level</td>
</tr>
<tr>
<td>Review AWPBs</td>
<td>Review AWPBs</td>
</tr>
<tr>
<td>Monitor implementation progress</td>
<td>Monitor implementation progress</td>
</tr>
<tr>
<td>Review and approve sub-project proposals</td>
<td>Review and approve sub-project proposals</td>
</tr>
<tr>
<td>Technical guidance on matters referred by CPCU or CPSC</td>
<td>Technical guidance on matters referred by CPCU or CPSC</td>
</tr>
<tr>
<td>AWPB</td>
<td>AWPB</td>
</tr>
<tr>
<td>Progress of implementation at county level</td>
<td>Progress of implementation at county level</td>
</tr>
<tr>
<td>Project performance against targets</td>
<td>Project performance against targets</td>
</tr>
<tr>
<td>Problems encountered in implementation at county level</td>
<td>Problems encountered in implementation at county level</td>
</tr>
<tr>
<td>Proposed solutions to problems</td>
<td>Proposed solutions to problems</td>
</tr>
<tr>
<td>Success stories and lessons learned</td>
<td>Success stories and lessons learned</td>
</tr>
<tr>
<td>Project semi-annual and annual progress reports</td>
<td>Project semi-annual and annual progress reports</td>
</tr>
<tr>
<td>County performance dashboard</td>
<td>County performance dashboard</td>
</tr>
<tr>
<td>Day-to-day coordination and management</td>
<td>Day-to-day coordination and management</td>
</tr>
<tr>
<td>Preparing AWPBs</td>
<td>Preparing AWPBs</td>
</tr>
<tr>
<td>Progress of implementation at county level</td>
<td>Progress of implementation at county level</td>
</tr>
<tr>
<td>Implementation rates</td>
<td>Implementation rates</td>
</tr>
<tr>
<td>Project semi-annual and annual progress reports</td>
<td>Project semi-annual and annual progress reports</td>
</tr>
</tbody>
</table>
| **CPCU** | • Management of CPCU staff  
• Review proposals for micro- and sub-projects  
• M&E of project activities at county, ward and community levels  
• Preparation of progress reports, financial and procurement reports  
• Archiving of all M&E data and information  
• Facilitation of capacity building activities  
• Field monitoring visits  
• (physical and financial rates) of the AWPB  
• Staff performance and capacities  
• Problems encountered in implementation of micro- and sub-projects  
• Beneficiary feedback on project implementation  
• Grievances, proposed solutions to problems  
• Success stories and lessons learned  
• Quarterly, semi-annual and annual progress reports  
• County AWPB  
• County performance dashboard | **COMMUNITY STAKEHOLDERS** | • Participate in project planning and identification of micro- and sub-projects  
• Participate in micro- and sub-project implementation  
• Monitor and evaluate micro- and sub-project implementation  
• Communicate problems and complaints to project agencies  
• Ensure effective and efficient use of project resources  
• Progress of overall project implementation  
• Approved micro- and sub-project activities and funds  
• Implementation status of micro- and sub-projects  
• Results of micro- and sub-projects  
• Problems encountered in implementation  
• Proposed solutions to problems  
• Success stories and lessons learned  
• Annual project implementation summary  
• Micro- and sub-project information disclosure  
• Micro- and sub-project M&E reports  
• Citizen engagement activities | **Community members** | • Quarterly, semi-annual and annual progress reports  
• County AWPB  
• County performance dashboard |
Table 5: Summary of M&E responsibilities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsibility</th>
<th>M&amp;E Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal monitoring at national level</td>
<td>NPCU</td>
<td>• Quarterly, semi-annual and annual progress reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mid-term review report</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Project completion report</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MIS and Dash Board</td>
</tr>
<tr>
<td>Internal monitoring at county level</td>
<td>CPCU</td>
<td>• Quarterly, semi-annual and annual progress reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Producer Group Tracker</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ongoing disclosure of project implementation (e.g. approval of micro-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and sub-grants) and M&amp;E results (e.g. micro- and sub-grant M&amp;E reports)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Grievance Redress Report</td>
</tr>
<tr>
<td>External monitoring (supervision, mid-term</td>
<td>GoK World Bank</td>
<td>• Supervision &amp; implementation support reports (aide-mémoire)</td>
</tr>
<tr>
<td>review)</td>
<td></td>
<td>• Mid-term review reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Implementation Completion Report</td>
</tr>
<tr>
<td>Results measurement and evaluation</td>
<td>NPCU with support from contracted consultants</td>
<td>• Baseline surveys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow-up surveys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• semi-annual and annual progress reports</td>
</tr>
<tr>
<td>Impact evaluation &amp; special studies</td>
<td>NPCU/DIME with support from</td>
<td>• Baseline surveys</td>
</tr>
<tr>
<td></td>
<td>contracted consultants</td>
<td>• Impact evaluation studies</td>
</tr>
<tr>
<td></td>
<td>NPCU with support from</td>
<td>• Special study reports</td>
</tr>
<tr>
<td></td>
<td>contracted consultants</td>
<td></td>
</tr>
</tbody>
</table>

3.3 Main contents and structure of the M&E Manual
This M&E Manual is subdivided into nine chapters plus additional annexes.

Chapters 1-3 are introductory chapters, presenting overviews of KCSAP, basic concepts of M&E and the purpose and contents of this manual. The remaining chapters describe the substantial content of the KCSAP M&E system. Chapter 4 identifies indicators to track progress in relation to the project theory of change, describing 4 results chains and the specific indicators associated with each result chain. Chapter 5 explains the conduct of evaluation in KCSAP, including baseline survey, mid-term review, project completion evaluation as well as more targeted evaluation studies. Chapter 4 explains how process and results monitoring and evaluation will be implemented in practice, identifying 9 packages of related M&E activities that form the basis of M&E in the project. Chapter 7 describes institutional
arrangements for implementing M&E in the project, with sub-sections on data management through the PMIS and integrating learning into the project implementation process.

Chapter 8 identifies key M&E capacity building needs, and Chapter 9 outlines a workplan for development of the KCSAP M&E system. The main annexes describe the specific indicators required for evaluation baselines, reference cards describing specific requirements for each results measurement indicator, templates for data collection, and ToRs for key tasks in implementation of the M&E system.
4. KCSAP results measurement framework

4.1 Mapping of Strategic results chains to progress and results indicators

KCSAP PAD describes the individual sub-components of the project. Several sub-components inter-relate, contributing to the same targeted outcomes. This section provides a clear outline of the relationship between sub-components and their outcomes. Figure 3 provides an overview of how sub-components contribute to intermediate outcomes that form distinct results chains. The intermediate outcomes are:

- adoption of climate smart agricultural and livestock husbandry practices and improving access to markets (Results Chain 1)
- Improved functional performance of the national agricultural research, extension and seed supply system (Results Chain 2); and
- Increased access to and use of improved risk mitigation tools (Results Chain 3).

In addition to these three results chains, Results Chain 4 tracks the efficient management of the project, which will contribute to the three intermediate outcomes listed above.

Each results chain consists of two or three sub-chains through which the intermediate outcomes will be delivered. Each results chain is described by indicators of outputs, immediate outcomes and intermediate outcomes. The following sections describe each of the results chains and their output and outcome indicators. Each indicator is described in detail in the indicator reference sheets in Annex C.
Figure 3: Results chains for tracking the project theory of change

Climate-smart Agro-pastoral and pastoral production systems:
Increased productivity, enhanced resilience (adaptation), and reduced GHG emissions (mitigation)

Intermediate Outcomes

Climate-smart agricultural and husbandry practices adopted & access to markets improved
(RC 1)

Improve functional performance of the national agricultural research, extension and seed supply system
(RC 2)

Access to and use of improved risk-mitigation tools
(RC 3)

Behavioral change of farmers, researchers, seed producers, service delivery agents and other stakeholders

Outputs

RC 1A: Citizen engagement and service delivery capacity strengthened
- Participatory CSA investment plans
- Quality & outreach of public/private advisory service delivery

RC 1B: CSA investment implementation performance:
- Community-micro projects
- County-level sub-projects
- Cross-county sub-projects
- “Productive Alliances”

RC 2A: Strengthened NARS innovation capacities:
- Climate-smart research outputs
- Effective dissemination mechanisms

RC 2B: Increased agricultural input production:
- Seed, fingerlings and breed stock

RC 2C: Strengthened seed retail networks:
- Seed, fingerlings and breed stock

RC 3A: Well-functioning agro-weather and market information systems
- Agro-weather and market information

RC 3B: Improved insurance products developed
- Crop and livestock insurance

SC 1.1
SC 1.2 & 1.3
SC 2.1 & 2.3
SC 2.2
SC 3.1, 3.2 & 3.3
SC 3.2

Note: RC stands for “results chain”. SC stands for “sub-component”. RC4 (efficient project management) is not shown in the figure.

Results Chain 1.A: Citizen engagement and service delivery capacity strengthened

Project Sub-component 1.1 focuses on building institutional capacity at county, ward, and community levels to plan, implement, manage and monitor ward/county sub-projects and community micro-projects in all selected 24 counties. The capacities to be developed include those required for:

- CSA planning and prioritization of sub-project investments at county and ward levels
- Identification and planning of micro-project investments at community level
- Formation of micro-project and sub-project management committees
- Participatory contracting of private advisory service providers and/or provision of advisory services by public institutions
- Formation and facilitation of CIGs/VMGs/POs
- Management and monitoring of micro-project and sub-project implementation; and
- Receiving and addressing grievances.

The main targets of capacity building include government agencies at county and sub-county level, community organisations at community, ward and county levels, and contracted service providers.
In combination with the project sub-components implementing sub-projects and micro-projects in agro-pastoral and pastoral systems, these activities contribute to an intermediate outcome whereby *climate smart agricultural and livestock husbandry practices are adopted and access to markets improved*. The outputs and expected outcomes of Sub-component 1.1 are summarized in Results Chain 1.A (Figure 4).

Immediate outcome indicators reflect beneficiaries’ satisfaction with the representation of their needs in the investment planning process and the quality of advisory services received. They also reflect improvement in technical capacities of advisory service providers due to the training provided by the project and the responsiveness of project institutions to complaints. Output indicators monitor the approval of plans and investment proposals as indicators of planning capacities, the creation of functioning project institutions, and the documentation of grievances received as indicators of capacities to manage the implementation of CSA activities. The Outcome and Output indicators for Results Chain 1.A are summarized in Table 6. In addition to these results indicators, progress in implementation of key activities and milestones set out in the extension and matching grants manuals (including ESMF tasks) will be tracked in the PMIS.

**Table 6: Indicators for Results Chain 1.A**

| Intermediate outcome statement: | *Climate smart agricultural and livestock husbandry practices are adopted and access to markets improved*  
PDO Indicator: Targeted beneficiaries (in CIGs/VMGs) who have adopted at least one TIMP promoted by the project (number, % female) |
| Immediate outcome statement | Improved quality of services |
| Immediate outcomes and indicators: | **Beneficiary satisfaction:**  
1. Beneficiaries’ satisfied with consideration of their views and needs in the investment planning process (%, disaggregated by gender)  
2. Beneficiaries satisfied with relevance, timeliness and effectiveness of TIMP advisory services received (% , disaggregated by gender)*  
**Responsive institutions:**  
3. Extension workers’ technical advisory capacity improved  
4. Grievances registered related to delivery of project benefits at community, ward and county levels that are actually addressed (percentage)* |
| Outputs indicators: | **Community level**  
5. # of CIGs/VMGs established  
6. # of proposals for CIG/VMG micro-projects registered  
7. # of CIG/VMG micro-project grants approved*  
8. # of grievances received at CIG/VMG level  
9. # of grievances at CIG/VMG level that have been resolved  
**Ward level**  
10. # no of person training days delivered for sub-county staff  
11. # of functional CDDCs (checklist score)  
12. # of grievances received at CDDC (ward) level  
13. # of grievances at CDDC level that have been resolved |
<table>
<thead>
<tr>
<th># of CIAPs ratified</th>
<th># of ward citizen engagement meetings held</th>
</tr>
</thead>
<tbody>
<tr>
<td># of participants attending citizen engagement meetings (by gender)</td>
<td></td>
</tr>
</tbody>
</table>

### County

<table>
<thead>
<tr>
<th># of functional CV CDCs (checklist score)</th>
<th># of person training days delivered to county staff</th>
</tr>
</thead>
<tbody>
<tr>
<td># of CSA Investment Plans approved</td>
<td># of counties that have integrated CSAIP in county annual plan and CIDP</td>
</tr>
<tr>
<td># of proposals for county sub-projects registered</td>
<td># of county sub-projects approved</td>
</tr>
<tr>
<td># of proposals for cross-county sub-projects registered</td>
<td># of cross-county sub-projects approved</td>
</tr>
<tr>
<td># of grievances received at county level</td>
<td># of grievances at county level that have been resolved</td>
</tr>
</tbody>
</table>

### PPPs

| # of PPP matching grants approved |

* indicates an indicator in the PAD results framework

---

**Figure 4: Results chain 1A: Citizen engagement and service delivery capacity strengthened**

### Interventions

- **Improved citizen engagement and service delivery capacity**
  - Community
    - # of CIGs/VMGs established
    - # of CIG/VMG micro-project proposals received
  - Ward
    - # of training days delivered to ward staff
    - # of grievances received at CIVM level
    - # of grievances received at ward level
    - # of grievances received at CIVM level resolved
  - # of CIVM micro-project proposals received
  - # of CIVM micro-project grants approved
  - # of proposals for CIVM micro-project grants approved
  - # of proposals for ward level CIVM micro-project grants approved
  - # of proposals for ward level CIVM micro-project grants approved

### Output

- **Improved quality of services**
  - Beneficiaries
    - Beneficiaries satisfied with consideration of their views and needs in the investment planning process
  - Beneficiaries satisfied with relevance, effectiveness and timeliness of TIMP advisory services received

### Intermediate Outcomes

- **Responsive institutions**
  - Technical advisory capacity improved

### Project Development Outcomes

- **Climate-smart agricultural and husbandry practices adopted**
- **Access to markets improved**

### Agro-pastoral and Pastoral Production Systems strengthened

- **PDO Indic. 1:** no. of beneficiaries
- **PDO Indic. 2:** Targeted beneficiaries (in CIGs/VMGs) who have adopted at least one TIMP promoted by the project (number, % female)
- **PDO Indic. 3:** Productivity increased
**Results Chain 1.B: CSA investment implementation performance**

Project Sub-component 1.2 supports investments in smallholder agropastoral production systems in 17 counties and sub-component 1.3 supports investments in pastoral production systems in 7 of the NEDI counties. In both regions, investments will be made in community micro-projects (Window I) and county sub-projects (Window II) to finance adoption of CSA TIMPs. In the NEDI region, investments in cross-county sub-projects are also planned. Companies in all 24 counties are also eligible for productive alliance investments (i.e. PPPs) through investment Window III.

Along with capacity building activities in sub-component 1.1, activities in sub-components 1.2 and 1.3 together contribute to an intermediate outcome whereby **climate smart agricultural and livestock husbandry practices are adopted and access to markets improved.** The outputs and expected outcomes of sub-components 1.2 and 1.3 are summarized in Results Chain 1.B (Figure 5). Output indicators focus on the number of micro- and sub-grants from each investment window that are successfully completed, numbers of micro- and sub-grant beneficiaries and client training days provided on CSA TIMPs. The immediate outcomes of micro- and sub-project implementation are reflected in the development of CIGs and VMGs as organisations for collective action, which will be tracked through a producer organisation scorecard, and in the adoption of TIMPs in livestock and crop production. Results Chain 1B will also track the intermediate outcomes through indicators of change in productivity for key targeted agricultural products, GHG emissions per unit product of key targeted agricultural products, and value of agricultural output sold as an indicator of improved market access.

**(1) CIG/VMG/PO level:** A significant proportion of the project’s beneficiaries will be engaged through CIGs, VMGs and other forms of producer organisation. Provision of advisory services to CIGs, VMGs and POs is a main channel for delivery of support for adoption of CSA practices and a platform for increasing beneficiaries’ access to credit for investment in adoption of TIMPs and for smoothing consumption effects of weather and other shocks. The development of CIGs and VMGs as organisations to enable collective action is critical to the sustainability of KCSAP’s interventions. If CIGs and VMGs are able to serve their members needs, enable members to link with sources of advice, inputs, credits or marketing opportunities, then there is a stronger likelihood that project benefits can be maintained over time.

A Producer Group development tracker (Annex D.5) will track the performance of producer groups (CIGs, VMGs or POs) along several dimensions (e.g. organisational development, organisational performance), resulting in categorization of CIGs, VMGs and POs at different levels of development (Table 7). Monitoring producer group performance will indicate the progression between levels of development and the trend during the project implementation period.
Table 7: CIG and VMG development levels

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forming</td>
<td>Developing</td>
<td>Operating</td>
<td>Formalized</td>
</tr>
<tr>
<td>The group is formed with initial membership. Management structures and processes, activity plans are still under development</td>
<td>Management structures and processes meet KCSAP requirements. The group has an activity or enterprise development plan. One main group activity is being conducted</td>
<td>Management structures and processes are functional. A funded activity or enterprise development plan is being implemented. Group activities are diversified.</td>
<td>Management structures and processes are functional. The group has a profitable value addition activity and/or marketing contracts and agreements.</td>
</tr>
</tbody>
</table>

(2) Household agricultural enterprise level: Adoption of TIMPs by households is expected to increase productivity. This will be facilitated by access to inputs, advisory services, agro-meteorology information and credit. Positive effects of increased productivity on household income, consumption and assets will depend on marketing opportunities as well as costs of production, which is an issue in several commercial value chains in Kenya. An annual household enterprise performance survey (integrated into the Producer Group Tracker template in Annex D.5) will track at CIG and VMG member household level in the following dimensions:

- Adoption of land- and livestock-based TIMPs
- Crop and livestock productivity
- Volume and value of marketed agricultural products
- Variables tracking components of the RIMA-II resilience index:
  - Number of household income generating activities
  - Number of crops cultivated
  - Access to and use of credit
  - Participation in training

This will provide evidence of changes at household level in progress towards the project development objectives. A separate survey conducted after beneficiaries are registered will be conducted at baseline, mid-term and at project completion to estimate change in GHG emission intensity due to changing farming practices (see Annex E). The methodology will vary for different agricultural commodities. The survey will be conducted on a sub-sample of registered producer organisation members. Further details are given in the relevant monitoring indicator templates in Annex E.

The Outcome and Output indicators for Results Chain 1.B are summarized in Table 8. In addition to these results indicators, progress in implementation of key activities and milestones set out in the extension and matching grants manuals (including ESMF tasks) will be tracked in the PMIS.
### Table 8: Indicators for Results Chain 1.B

<table>
<thead>
<tr>
<th>Intermediate outcome statement</th>
<th>Climate smart agricultural and livestock husbandry practices are adopted and access to markets improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate outcome indicators:</td>
<td>28. Change in productivity of selected agricultural commodities supported by the project (% change, disaggregated by commodity type)*</td>
</tr>
<tr>
<td></td>
<td>29. Change in net GHG emissions per unit (kilogram) of product produced for selected agricultural commodities (% change, disaggregated by commodity type)*</td>
</tr>
<tr>
<td></td>
<td>30. Value of agricultural output of targeted agricultural products sold (KSh)</td>
</tr>
<tr>
<td>Immediate outcomes and indicators:</td>
<td>Improved collective action</td>
</tr>
<tr>
<td></td>
<td>31. Producer organisation development (checklist)</td>
</tr>
<tr>
<td>Adoption of TIMPs</td>
<td>32. Targeted beneficiaries in CIGs/VMGs who have adopted at least one TIMP promoted by the project (number, % female)*</td>
</tr>
<tr>
<td></td>
<td>33. Head of livestock brought under TIMPS as a result of the project (by sub-category)*</td>
</tr>
<tr>
<td></td>
<td>34. Area of land (ha) brought under TIMPS as a result of the project (by sub-category)*</td>
</tr>
<tr>
<td>Outputs and indicators:</td>
<td>Community micro-projects</td>
</tr>
<tr>
<td></td>
<td>35. Client-days of training for CIG/VMG members provided on TIMPS (person days, % women)*,**</td>
</tr>
<tr>
<td></td>
<td>36. Number of TIMPS promoted</td>
</tr>
<tr>
<td></td>
<td>37. % of CIG/VMG micro-grant projects successfully completed*</td>
</tr>
<tr>
<td></td>
<td>38. # of beneficiaries in CIGs and VMGs reached with agricultural / animal husbandry assets or services (sub-categories, % women)</td>
</tr>
<tr>
<td>County sub-projects</td>
<td>39. % of county matching grant projects successfully completed*</td>
</tr>
<tr>
<td></td>
<td>40. Infrastructure rehabilitated or constructed by county sub-grants (sub-categories)</td>
</tr>
<tr>
<td></td>
<td>41. # of beneficiaries reached with agricultural / animal husbandry assets or services by county sub-grant projects (sub-categories, % women)*</td>
</tr>
<tr>
<td></td>
<td>42. Client-days of training provided on TIMPS in county sub-grant projects (person days, % women)*,**</td>
</tr>
<tr>
<td>PPPs sub-projects</td>
<td>43. % of PPP matching grant projects successfully completed*</td>
</tr>
<tr>
<td></td>
<td>44. # of beneficiaries of PPP grants reached with agricultural / animal husbandry assets or services (of which, % women)*</td>
</tr>
<tr>
<td></td>
<td>45. Client-days of training provided on TIMPS (person days, % women)*,**</td>
</tr>
</tbody>
</table>

* indicates an indicator in the PAD results framework ** indicates an indicator directly contributing to the RIMA-II resilience index
Figure 5: Results chain 1B: CSA investment implementation performance

**Intervention**
- Community micro-projects
  - # Client-days of training provided on TIMPS
  - % Micro-grant projects successfully completed
  - # of beneficiaries reached with agricultural / animal husbandry assets or services (sub-categories, % women)

- County sub-projects
  - % matching grant projects successfully completed
  - Infrastructure rehabilitated or constructed (by sub-category)
  - # of beneficiaries reached with agricultural / animal husbandry assets or services (of which, % women)
  - # Client-days of training provided on TIMPS

- Productive Alliances (PA)
  - # matching grant projects successfully completed
  - # of beneficiaries reached with agricultural / animal husbandry assets or services (of which, % woman)
  - # Client-days of training provided on TIMPS

**Output**
- CSA Investments implemented
  - Changing farmer behavior
    - Increased collective action
      - Producer organisation development

- Early adoption of TIMPS
  - Head of livestock brought under livestock husbandry TIMPS as a result of the project (by sub-category)
  - Area of land (ha) brought under TIMPS as a result of the project (by sub-category)
  - Targeted beneficiaries in CIGs/VMOs who have adopted at least one TIMP promoted by the project (number, % female)

**Immediate Outcomes**
- Climate-smart agricultural & husbandry practices adopted
  - Change in productivity of selected agricultural commodities
  - Change in net GHG emissions per unit (kg) of product for selected agricultural commodities (Percentage)

**Intermediate Outcomes**
- Access to markets improved
  - Value of agricultural output sold of targeted agricultural products (KSh)

**Project Development Outcomes**
- Agro-pastoral and Pastoral Production Systems strengthened
  - PDD Indic. 1: Number of beneficiaries reached with agricultural assets or services
  - PDD Indic. 2: Targeted beneficiaries (in CIGs/VMOs) who have adopted at least one TIMP promoted by the project (number, % female)
  - PDD Indic. 3: Productivity increased
  - Reduced net GHG emissions
Results Chain 2.A: Strengthened NARS innovation capacities

Project Sub-component 2.1 supports strengthening the national agriculture research system (NARS) to use demand-driven, applied and adaptive research approaches to develop, validate and disseminate context-specific CSA TIMPs. Interventions include installation of research lab equipment and long- and short-term training to increase NARS technical capacities; adaptive and applied research to develop, test and validate CSA TIMPs together with users; and training course development and training for the dissemination of validated TIMPs. Some long- and short-term training activities are also planned under Sub-component 2.3. Together, these activities aim to strengthen NARS innovation capacities. In combination with the project sub-components on strengthening seed systems, these activities contribute to an intermediate outcome of improved functional performance of the national agricultural research, extension and input supply system. Improved functional performance is measured by the % of beneficiaries satisfied with the quality of TIMP advisory services received and the % satisfied with access to seed inputs. Data on these indicators will be collected through results chains 1B and 2C.

The outputs and expected outcomes relating from Sub-component 2.1 and NARS-related capacity building in Sub-component 2.3 are summarized in Results Chain 2.A (Figure 6). At the immediate outcome level, improved capacities will be measured through the following indicators. Sustained and effective innovation for CSA requires that researchers obtain feedback on CSA TIMPs. Therefore, the number of NARS institutions using the CSA M&E system (established under Component 2.1.4 C socio-economic research, which may also use feedback from the ICT based AIP established in Component 3) is an indicator of innovation capacity. The number of TIMPs formally released is also an indicator of ongoing innovation. Several activities in Sub-component 2.1 aim to strengthen collaboration among NARS institutions and collaboration with industry stakeholders. Collaboration will be measured through the number of research fairs held, and the number of platforms established for intra- and inter-institution information exchange. Sub-component 2.1 also strengthens TIMP dissemination capacities and ‘re-tooling’ of advisory staff through training of trainers and short-term technical training. This will be measured through the number of training of trainer (ToT) person days delivered and the % of TIMPs formally released that are promoted through ToT courses.

Outputs to deliver these outcomes are measured through indicators of change in technical capacities for multidisciplinary research (i.e. research infrastructure and training of researchers); indicators tracking the conduct of applied and adaptive research together with farmers; and indicators of the production of training materials and curricula that can be used in the ToTs to disseminate TIMPs. The Outcome and Output indicators for Results Chain 2.A are summarized in Table 9. In addition to these results indicators, progress in implementation will be tracked in the PMIS by monitoring implementation of activities in Project Sub-component 2.1 (including ESMF tasks).
### Table 9: Indicators for Results Chain 2.A

<table>
<thead>
<tr>
<th>Intermediate outcome statement and indicator</th>
<th>Improved functional performance of the national agricultural research, extension and input supply system&lt;br&gt;% of targeted beneficiaries satisfied with relevance, timeliness, and effectiveness of TIMP advisory services received (disaggregated by gender)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate outcome statement:</td>
<td>Improved capacity to realise the potential of innovation</td>
</tr>
<tr>
<td>Immediate outcomes and indicators:</td>
<td>Adaptive innovation capacities:&lt;br&gt;46. # of NARS institutions using the CSA M&amp;E system&lt;br&gt;47. # of TIMPs formally released</td>
</tr>
<tr>
<td></td>
<td>Capacities for collaboration:&lt;br&gt;48. # of research fairs held&lt;br&gt;49. # of research &amp; innovation platforms for inter- and intra-institutional information, exchange/transfer</td>
</tr>
<tr>
<td></td>
<td>Capacities for dissemination:&lt;br&gt;50. # of ToT training person days delivered&lt;br&gt;51. # of trainers trained through TOTs&lt;br&gt;52. % of formally released TIMPS that are promoted in ToT courses</td>
</tr>
<tr>
<td>Outputs and indicators:</td>
<td>Improved technical capacity for multi-disciplinary research&lt;br&gt;53. % of planned value of procurement of equipment completed&lt;br&gt;54. # of postgraduate degree and short-term (PhD, MSc, short-course) technical trainings completed, share (%) of which completed by women*</td>
</tr>
<tr>
<td></td>
<td>CSA crop, livestock and aquaculture TIMPs developed and tested together with users&lt;br&gt;55. # of collaborative research grant projects completed (adaptive, applied)&lt;br&gt;56. # of farmers participating in on-farm TIMPs trials, share of which female (%)<em>&lt;br&gt;57. # of TIMPs tested through on-farm trials, share of which validated (%)</em></td>
</tr>
<tr>
<td></td>
<td>ToT materials prepared&lt;br&gt;58. # of ToT manuals on TIMPs produced and published&lt;br&gt;59. # curricula developed and piloted</td>
</tr>
</tbody>
</table>

* indicates an indicator in the PAD results framework
**Table 9: Indicators for Results Chain 2A**

**Intermediate outcome statement and indicator**

**Immediate outcome statement:** Improved capacity to realize the potential of innovation

**Immediate outcomes and indicators:**

- Adaptive innovation
  - # NARS institutions using the CSA M&E system
  - # of TIMPs formally released (e.g. improved seeds, practices, breeding stock)

- Collaboration
  - # of research fairs held
  - # platforms for inter- and intra-institutional information sharing

- Effective facilitation of learning & dissemination
  - # of ToT training person days delivered
  - # of trainers trained through ToT
  - % of formally released TIMPs that are promoted in ToT courses

**Outputs and indicators:**

- Improved technical capacity for multi-disciplinary research
  - % of planned procurement of equipment (in USS) completed
  - # of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed, share (%) of which completed by women

- CSA crop, livestock and aquaculture TIMPs developed and tested together with users
  - # of collaborative research grant projects completed (adaptive, applied)
  - # of farmers participating in on-farm TIMP trials, share of which female (%)
  - # of TIMPs tested through on-farm trials, share of which validated (%)

- ToT material prepared
  - # of ToT manuals on TIMPs produced
  - # CSA curricula developed and launched

**Project Development Outcomes**

- Agro-pastoral and Pastoral Production Systems strengthened

**Indicators**

- PDO Indic. 1: number of beneficiaries
- PDO Indic. 2: Targeted beneficiaries (in CIGs/VMGs) who have adopted at least one TIMP promoted by the project (number, % female)
- PDO Indic. 3: Productivity increased

**Reduced net GHG emissions**
Results Chain 2.B: Increased production of seed, fingerlings and breed stock

Project Sub-component 2.2 supports strengthening of seed, fingerling and breed stock multiplication and production. Interventions to implement this include market studies, technical and financial support for organisational and business service development, and support for development of the legal and policy environment. The target beneficiaries include community-based organisations (including CIGs/POs and SMEs) and other enterprises engaged in plant seed, fingerling and livestock breed stock production. These activities aim to *increase production of seed, fingerlings and breed stock*. Together with project sub-components strengthening NARS research capacities and seed retail systems, these activities contribute to an intermediate outcome of *improved functional performance of the national agricultural research, extension and input supply system*. The outputs and expected outcomes relating to seed production in Sub-component 2.2 are summarized in Results Chain 2.B (Figure 7).

Immediate outcome indicators reflect the outcome of seed, fingerling and breed stock production activities. The volume of CSA seed, fingerling and breed stock produced by producers supported by the project is the indicator of increased production. The number of seed CIGs certified is an indicator of improved institutional effectiveness. Other institutional interventions, such as convening meetings to support reforms in community-based seed producer registration/certification, NARS germplasm licensing and transfer policy, and seed quality assurance standards are included as output indicators. The Outcome and Output indicators for Results Chain 2.B are summarized in Table 10. In addition to these results indicators, progress in implementation will be tracked in the PMIS by monitoring implementation of related activities in Project Sub-component 2.2. In addition to the activities listed in the sub-component design, grants supported in Sub-component 2.2 may be subject to environmental and social safeguards.

Table 10: Indicators for Results Chain 2.B

<table>
<thead>
<tr>
<th>Intermediate outcome statement</th>
<th>Improved functional performance of the national agricultural research, extension and input supply system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate outcome statement:</td>
<td>Increased seed, fingerlings and breed stock production capacities</td>
</tr>
<tr>
<td>Immediate outcomes and indicators:</td>
<td>Seed, fingerling &amp; breed stock production:</td>
</tr>
<tr>
<td></td>
<td>60. Volume of CSA inputs produced by crop seed, breed stock and fingerlings producers supported by the project (metric ton for crop seed, head for livestock parent stocks, number for fish fingerlings, by sub-type: <em>foundation seed; certified seed/quality assured/declared; livestock parent/breeding stocks)</em></td>
</tr>
<tr>
<td></td>
<td>Improved institutional effectiveness:</td>
</tr>
<tr>
<td></td>
<td>61. # of community-based seed producers registered / certified</td>
</tr>
</tbody>
</table>
Results Chain 2.B: Increased production of seed, fingerlings and breed stock

Project Sub-component 2.2 supports strengthening of seed, fingerling and breed stock multiplication and production. Interventions to implement this include market studies, technical and financial support for organisational and business service development, and support for development of the legal and policy environment. The target beneficiaries include community-based organisations (including CIGs/POs and SMEs) and other enterprises engaged in plant seed, fingerling and livestock breed stock production. These activities aim to increase production of seed, fingerlings and breed stock. Together with project sub-components strengthening NARS research capacities and seed retail systems, these activities contribute to an intermediate outcome of improved functional performance of the national agricultural research, extension and input supply system.

Outputs and indicators:

<table>
<thead>
<tr>
<th>Community-based seed CIGs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>62. # of seed CIGs established (by sub-type)</td>
</tr>
<tr>
<td>63. # of seed CIGs receiving technical assistance / support (by sub-type)*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual seed producers:</th>
</tr>
</thead>
<tbody>
<tr>
<td>64. # of seed production units receiving technical assistance/support (by sub-type VCs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legal/policy environment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>65. # of meetings/workshops held to support registration/certification of community-based seed producers</td>
</tr>
<tr>
<td>66. # of meetings/workshops held to support the NARS germplasm licensing and transfer policy</td>
</tr>
<tr>
<td>67. # of meetings/workshops held to support the development of seed quality assurance standards</td>
</tr>
<tr>
<td>68. # of meetings/workshops held to support establishment of Public-Private Dialogue on seed</td>
</tr>
</tbody>
</table>

* indicates an indicator in the PAD results framework
Figure 7: Results chain 2B: Increased production of seed, fingerlings and breed stock

Seed producers supported

Community-based seed CIGs:
- # of seed CIGs formed (by sub-type)
- # of seed CIGs receiving technical assistance via the project (by sub-type)

Individual seed producers:
- # of seed production units receiving technical assistance/support via the project (by sub-type)

Legal/policy environment:
- # of meetings held to support registration/certification system for community-based seed producers
- # of meetings held to NARS germplasm licensing and transfer policy
- # of meetings held to support seed quality assurance standards
- # of meetings held to support establishment of Public-Private Dialogue on seeds

Seed, fingerling & breed stock production capacities

Seed production
- Volume (metric tonnes) of CSA seed, breed stock & fingerlings produced
  - Foundation seed
  - Certified/Quality assured seed
  - livestock parent stocks
  - Fish fingerlings (by sub-type)

Improved institutional effectiveness
- # of seed CIGs certified

Improved functional performance of the national agricultural research, extension and input supply system

- % of targeted beneficiaries satisfied with
  (i) relevance, timeliness, and effectiveness of TIMP advisory services received
  (ii) access to seed, fingerling and breed stock inputs

Agro-pastoral and Pastoral Production Systems strengthened

PDO Indic. 1: number of beneficiaries

PDO Indic. 2 Targeted beneficiaries (in CIGs/VMGs) who have adopted at least one TIMP promoted by the project (number, % female)

PDO Indic. 3: Productivity increased

Reduced net GHG emissions
Results Chain 2.C: Strengthened retail networks for seed, fingerlings and breed stock

In addition to seed production, project Sub-component 2.2 supports strengthening of seed, fingerling and breed stock retail networks. Interventions to implement this include assisting seed CIGs/POs to establish seed sales / distribution networks; certification of input dealers; creation and expansion of mobile- and web-based platforms to link retailers and wholesalers; establishment of revolving funds and credit guarantee schemes to support input dealers; and capacity building for input trading associations. These activities cover plant seeds, fingerlings and livestock breed stock. These activities aim to strengthen seed, fingerlings and breed stock retail networks. Together with project sub-components strengthening NARS innovation capacities and seed production systems, these activities contribute to an intermediate outcome of improved functional performance of the national agricultural research, extension and input supply system. The outputs and expected outcomes relating to seed retail networks in Sub-component 2.2 are summarized in Results Chain 2.C (Figure 8).

This results chain will measure the intermediate outcome of improved functional performance through the indicator: percent of targeted beneficiaries (by gender) satisfied with access to seed inputs. Indicators of immediate outcomes of project activities reflect the availability of seed, fingerling and breed stock varieties produced with project support that can be accessed by farmers and pastoralists in the targeted project areas, and indicators of strengthened retail networks (i.e. users of project-supported mobile or web-based platforms and beneficiaries of financial mechanisms targeting input dealers). The Outcome and Output indicators for Results Chain 2.C are summarized in Table 11. In addition to these results indicators, progress in implementation will be tracked in the PMIS by monitoring implementation of related activities in Project Sub-component 2.2. In addition to the activities listed in the sub-component design, grants supported in Sub-component 2.2 may be subject to environmental and social safeguards.

Table 11: Indicators for Results Chain 2.C

<table>
<thead>
<tr>
<th>Intermediate outcome statement and indicator:</th>
<th>Strengthened retail networks for seed, fingerlings and breed stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>69. % of targeted beneficiaries satisfied with access to seed, fingerling and breed stock inputs (disaggregated by gender)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Immediate outcomes and indicators:</th>
<th>Increased seed, fingerling &amp; breed stock retail capacities</th>
</tr>
</thead>
<tbody>
<tr>
<td>70. # of wards where priority CSA seeds (crop varieties, livestock breed, fingerlings) promoted as part of the CIAP are predominantly accessible by farmers, pastoralists and fish farmers.</td>
<td></td>
</tr>
<tr>
<td>71. # of input dealers benefiting from revolving funds and credit guarantee schemes*</td>
<td></td>
</tr>
<tr>
<td>72. # of input dealers and wholesalers using mobile-or web-based platforms supported by the project</td>
<td></td>
</tr>
</tbody>
</table>
| Outputs and indicators: | **Community-based seed CIGs:**  
73. # CIGs/VMGs/POs supported to develop seed sales/distribution networks* |
| --- | --- |
| | **Capacity building of retailers:**  
74. # of input dealers trained and certified  
75. # of revolving fund and credit guarantee schemes established (sub-type)  
76. # of mobile- or web-based platforms launched to link input supply chain actors |

* indicates an indicator in the PAD results framework
Figure 8: Results chain 2C: Strengthened retail networks for seed, fingerlings and breed stock

Interventions

- Assist CIGs/POs to establish seed sales/distribution networks
- Form and strengthen input trader associations
- Revolving fund and credit guarantee scheme for input dealers
- Develop mobile- or web-based platforms to link input supply chain actors
- Legal and policy framework reforms

Output

Seed retail system upgraded

- # CIGs/POs supported to develop seed sales/distribution networks
- # of input dealers trained & certified
- # revolving fund and credit guarantee schemes established (sub-type)
- # of mobile- or web-based platforms launched to link input supply chain actors

Immediate Outcomes

Increased seed, fingerling & breed stock retail capacities

- # of wards where priority CSA seeds (crop varieties, livestock breed, fingerlings) promoted as part of the CIAP are predominantly accessible by farmers, pastoralists and fish farmers
- # of input dealers benefiting from revolving funds and credit guarantee schemes
- # of input dealers and wholesalers using mobile- or web-based platforms supported by the project

Intermediate Outcomes

Agro-pastoral and Pastoral Production Systems strengthened

- Improved functional performance of the national agricultural research, extension and input supply system
  - % of targeted beneficiaries satisfied with i) relevance, timeliness, and effectiveness of TIMP advisory services received ii) access to seed, fingerling and breed stock inputs (disaggregated by gender)
- PDO Indic. 1: number of beneficiaries
- PDO Indic. 2: Targeted beneficiaries (in CIGs/VMGs) who have adopted at least one TIMP promoted by the project (number, % female)
- PDO Indic. 3: Productivity increased
- Reduced net GHG emissions

Project Development Outcomes
**Results Chain 3.A: Increased use of risk mitigation tools is enabled through well-functioning agro-weather and market information systems**

Project Component 3 supports provision of integrated agro-weather and market advisory services. These activities, their outputs and expected outcomes are summarized in Results Chain 3.A (Figure 9). Together, these activities aim to enable *increased use of risk mitigation tools through well-functioning agro-weather and market information systems*.

Interventions include installation of infrastructure to improve meteorological monitoring, as well as the development of ICT systems to enable integrated analysis of data on agronomic, meteorological and agricultural market topics. Short- and long-term training will be provided to ensure that the installed infrastructure and systems can be used and maintained and to strengthen analytical capacities. Although the installation of infrastructure is part of Sub-Component 3.1, the development of ‘big data’ ICT systems is part of Sub-Component 3.2, and training activities will be supported under Sub-component 3.3, together these activities aim to lead to the same intermediate outcomes: i.e. increased use of integrated weather and market information by project beneficiaries, and improved institutional effectiveness for sustained provision of integrated agro-weather and marketing advisory services. Therefore, they have been integrated into the same results chain.

The intermediate outcome will be measured by the percentage of beneficiaries satisfied with relevance, timeliness and usefulness of integrated agro-weather and market advisories received (disaggregated by gender). Immediate outcomes are measured through the number of users (and % of which female) receiving integrated agro-weather information services and market information services. This indicator includes further sub-categories by type of service (e.g. agromet bulletins, agromet advisories, integrated agro-met / market advisories) and channel of service delivery (e.g. radio, SMS, extension worker etc). Sustained institutional capacities to provide effective services will be measured through an indicator of rules and regulations for data management and sharing among institutions providing integrated agro-weather and market information services.

The Outcome and Output indicators for Results Chain 3.A are summarized in Table 12. In addition to these results indicators, progress in implementation will be tracked in the PMIS by monitoring implementation of activities in Project Sub-components 3.1, 3.2 and 3.3 that contribute to this results chain. It is not expected that ESIA is required for any activities in this results chain.

**Table 12: Indicators for Results Chain 3.A**

<table>
<thead>
<tr>
<th>Intermediate outcome statement</th>
<th>Increased access to and use of improved risk-mitigation tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate outcome indicators:</td>
<td>77. % of beneficiaries satisfied with relevance, timeliness and usefulness of agro-weather-market advisories received (disaggregated by gender)</td>
</tr>
<tr>
<td>Immediate</td>
<td>Improved access by beneficiaries:</td>
</tr>
</tbody>
</table>
Results Chain 3.A: Increased use of risk mitigation tools is enabled through well-functioning agro-weather and market information systems

Project Component 3 supports provision of integrated agro-weather and market advisory services. These activities, their outputs and expected outcomes are summarized in Results Chain 3.A (Figure 9).

Together, these activities aim to enable increased use of risk mitigation tools through well-functioning agro-weather and market information systems. Interventions include installation of infrastructure to improve meteorological monitoring, as well as the development of ICT systems to enable integrated analysis of data on agronomic, meteorological and agricultural market topics. Short- and long-term training will be provided to ensure that the installed infrastructure and systems can be used and maintained and to strengthen analytical capacities. Although the installation of infrastructure is part of Sub-Component 3.1, the development of ‘big data’ ICT systems is part of Sub-Component 3.2, and training activities will be supported under Sub-component 3.3, together these activities aim to lead to the same intermediate outcomes: i.e. increased use of integrated weather and market information by project beneficiaries, and improved institutional effectiveness for sustained provision of integrated agro-weather and marketing advisory services. Therefore, they have been integrated into the same results chain.

The intermediate outcome will be measured by the percentage of beneficiaries satisfied with relevance, timeliness and usefulness of integrated agro-weather and market advisories received (disaggregated by gender). Immediate outcomes are measured through the number of users (and % of which female) receiving integrated agro-weather information services and market information services. This indicator includes further sub-categories by type of service (e.g. agromet bulletins, agromet advisories, integrated agro-met / market advisories) and channel of service delivery (e.g. radio, SMS, extension worker etc).*

The Outcome and Output indicators for Results Chain 3.A are summarized in Table 12. In addition to these results indicators, progress in implementation will be tracked in the PMIS by monitoring implementation of activities in Project Sub-components 3.1, 3.2 and 3.3 that contribute to this results chain. It is not expected that ESIA is required for any activities in this results chain.

### Table 12: Indicators for Results Chain 3.A

<table>
<thead>
<tr>
<th>Intermediate outcome</th>
<th>Intermediate outcome indicators:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased access to and use of improved risk mitigation tools</td>
<td>77. % of beneficiaries satisfied with relevance, timeliness and usefulness of agro-weather-market advisories received (disaggregated by gender)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improved frameworks for data management and sharing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>79. Frameworks for data sharing in place</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product adaptation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>80. Quarterly user feedback reports published</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outputs and indicators:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infrastructure for agro-weather monitoring:</strong></td>
</tr>
<tr>
<td>81. # of new and refurbished agro-, automated weather stations and hydro-meteorological facilities (by sub-type)*</td>
</tr>
<tr>
<td>82. # of new and refurbished agro- and hydro-met centres</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Functioning integrated agro-weather and market information systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>83. # of Agromet Bulletins published</td>
</tr>
<tr>
<td>84. # of value chains covered in KALRO agro-weather platform</td>
</tr>
<tr>
<td>85. # of counties covered in KALRO agro-weather platform</td>
</tr>
<tr>
<td>86. # of counties covered in MOAI MIS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improved technical capacities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>87. # of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed, share (%) of which completed by women*</td>
</tr>
</tbody>
</table>

* indicates an indicator in the PAD results framework
Figure 9: Results chain 3A: Increased use of risk mitigation tools is enabled through well-functioning agro-weather and market information systems.
Results Chain 3.B: Access to improved risk mitigation tools is enabled through improved crop and livestock insurance products

Project Component 3 also supports the development of data and systems required for improved implementation of crop and livestock insurance, as a way of strengthening farmers’ access to agricultural risk-mitigation tools. Project activities will not, however, directly provide insurance to farmers or pastoralists. Rather, the focus is on providing the technical basis and institutional capacities for enabling the MOAI’s recently established Agricultural Insurance Unit (AIU) to sensitize and or promote agricultural insurance products. Suppliers of meteorological data will also be supported to provide data in suitable formats required for interpretation to be used in agricultural insurance, and on a regular basis.

The main interventions in this results chain are the designation of homogeneous production zones that can be used as units of insurance, improving the collection of agricultural data (including a time series for crop yields and forage availability data), and capacity building through training and advisory support to the AIU. Some of this training will be provided through Project Sub-Component 3.3, but activities in Project Sub-Component 3.2 also contribute to this results chain. These activities, their outputs and expected outcomes are summarized in Results Chain 3.B (Figure 10). Together, these activities aim to enable access to improved crop and livestock insurance products.

The indicator of this intermediate outcome is the number of new or improved crop and livestock insurance products available on the market. Immediate outcomes of project activities are the sensitization forums conducted by the MOAI agricultural insurance units to promote insurance. Table 13 summarizes the Immediate Outcome and Output indicators for Results Chain 3.B. In addition to these results indicators, progress in implementation will be tracked through the PMIS by monitoring implementation of activities in Project Sub-components 3.2 and 3.3 that contribute to this results chain.

Table 13: Indicators for Results Chain 3.B

<table>
<thead>
<tr>
<th>Intermediate outcome statement and indicators:</th>
<th>Increased access to and use of improved risk-mitigation tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>88. # of new or improved crop and livestock insurance products available on the market</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Immediate outcomes and indicators:</th>
<th>Improved institutional capacities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>89. # of sensitization forums conducted by the MOAI agricultural insurance units to promote insurance</td>
<td></td>
</tr>
<tr>
<td>90. # of beneficiaries attending sensitization forums conducted by MOAI agricultural insurance units (by gender)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outputs and indicators:</th>
<th>Unit areas of insurance established:</th>
</tr>
</thead>
<tbody>
<tr>
<td>91. # of homogeneous production zones maps developed</td>
<td></td>
</tr>
</tbody>
</table>

<p>| Agricultural statistics data collection systems: |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>92.</td>
<td># of crop cutting experiments being implemented</td>
</tr>
<tr>
<td>93.</td>
<td># of monthly forage availability updates disseminated</td>
</tr>
<tr>
<td>94.</td>
<td># of counties with historical agricultural data digitized</td>
</tr>
</tbody>
</table>

**Improved technical capacities:**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>95.</td>
<td># of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed, share (%) of which completed by women*</td>
</tr>
</tbody>
</table>

* indicates an indicator in the PAD results framework
Figure 10: Results chain 3B: Access to improved crop and livestock insurance products

- Establish homogeneous zones and unit areas of insurance
- Agricultural statistics data collection
- Appoint NDVI agent
- Institutional capacity of MAI agricultural insurance unit

**Intervention**

- **Systems in place for provision of data required for insurance**
  - Unit areas of insurance
    - # of homogeneous production zones maps developed

- **Ag Statistics data collection systems**
  - # of crop cutting experiments being implemented
  - # of monthly forage availability updates disseminated
  - # of counties with historical agricultural data digitized

- **Improved technical capacities**
  - # of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed, share (%) of which completed by women

**Output**

- **Improved implementation of crop & livestock insurance**
  - Improved institutional capacities
    - # of sensitization forums conducted by the MOAI agricultural insurance units to promote insurance
  - # of beneficiaries attending sensitization forums conducted by the MOAI AIU (by gender)

**Immediate Outcomes**

- Access to/ use of improved risk-mitigation tools

- **Intermediate Outcome**

  - # of new or improved crop and livestock insurance products available on the market

- **Project Development Outcomes**

  - Agro-pastoral and Pastoral Production Systems strengthened

  - PDO Indic. 1: no. of beneficiaries

  - PDO Indic. 2: Targeted beneficiaries (in CIGs/VMGs) who have adopted at least one TIMP promoted by the project (number, % female)

  - PDO Indic. 3: Productivity increased
Results Chain 4: Efficient management of the project
Project Component 4 includes sub-components for project coordination, monitoring and evaluation and impact evaluation. The intermediate outcomes supported by this results chain are the intermediate outcomes tracked in results chains 1, 2 and 3. The immediate outcomes of Results Chain 4 are the satisfactory and timely submission of quarterly project interim financial and progress monitoring reports; achievement of targets set out in the PAD results framework; and the percentage of grievances registered related to delivery of project benefits that have been addressed. Outputs monitored contributing to these outcomes include indicators of the conduct of management, planning, M&E and the grievance redress mechanism. Table 14 and Figure 11 summarize the Immediate Outcome and Output indicators for Results Chain 4.

Table 14: Indicators for Results Chain 4

<table>
<thead>
<tr>
<th>Intermediate outcome statements:</th>
<th>Adoption of climate smart agricultural and livestock husbandry practices and improving access to markets (Results Chain 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improved functional performance of the national agricultural research, extension and seed supply system (Results Chain 2);</td>
</tr>
<tr>
<td></td>
<td>Increased access to and use of improved risk mitigation tools (Results Chain 3).</td>
</tr>
<tr>
<td>Immediate outcomes and indicators:</td>
<td>Efficient project management:</td>
</tr>
<tr>
<td></td>
<td>96. Satisfactory quarterly project interim financial and progress monitoring reports submitted within 45 days of end of the previous period*</td>
</tr>
<tr>
<td></td>
<td>97. % achievement of targets in the PAD results framework</td>
</tr>
<tr>
<td></td>
<td>98. % of grievances registered related to delivery of project benefits that have been addressed*</td>
</tr>
<tr>
<td>Outputs and indicators:</td>
<td>Management system operational:</td>
</tr>
<tr>
<td></td>
<td>99. % of performance contracts in which expected results are fully linked to the project deliverables</td>
</tr>
<tr>
<td></td>
<td>100. % of PCUs that have reviewed and updated annual plans</td>
</tr>
<tr>
<td></td>
<td>101. % of trainings implemented as per the training plan</td>
</tr>
<tr>
<td></td>
<td>Planning system operational:</td>
</tr>
<tr>
<td></td>
<td>102. % of county annual workplan &amp; budgets submitted on time</td>
</tr>
<tr>
<td></td>
<td>103. % of national annual work plan and budgets submitted on time</td>
</tr>
</tbody>
</table>
### M&E system operational:

104. Operational PMIS in place

105. # of counties implementing the project M&E manual satisfactorily (assessed based on common county M&E performance checklist, see Annex G)

### Grievance redress mechanism operational:

106. Grievance receipt and redress documented in the PMIS

* indicates an indicator in the PAD results framework
Figure 11: Results chain 4: Efficient management of the project

- **Management systems operational**
  - Management
    - % of NPCU/CPCU staff with performance contracts in which expected results are fully linked to the project deliverables
    - % of PCUs that have reviewed and updated annual plans
    - % implementation of training plan
  - Planning
    - % of county annual workplan & budgets submitted on time
    - % of national annual workplan and budgets submitted on time
  - M&E
    - Operational PMIS in place
      - # of counties implementing the project M&E manual satisfactorily
    - Grievance redress mechanism
      - Grievance receipt and redress documented in PMIS

- **Efficient project management**
  - Satisfactory quarterly project interim financial and Progress monitoring reports submitted within 45 days of end of the previous period
  - % achievement of targets in the PAD results framework
  - % of grievances registered related to delivery of project benefits that have been addressed

- **Agro-pastoral and Pastoral Production Systems strengthened**
  - Climate-smart agricultural and husbandry practices adopted
  - Access to markets improved
  - Improved functional performance of the national agricultural research, extension and input supply system
  - Access to use of improved risk-mitigation tools

- **PDO Indic. 1:** no. of beneficiaries
- **PDO Indic. 2:** Targeted beneficiaries (in CIGs/VMGs) who have adopted at least one TIMP promoted by the project (number, % female)
- **PDO Indic. 3:** Productivity increased
5. Evaluation in KCSAP

Evaluation serves two main functions:

- To assess the efficiency, effectiveness, impact, relevance and sustainability of the project, and
- To draw lessons for future policies, programmes and interventions.

The indicators set out in Chapter 4 map outputs and outcomes along several results chains that reflect the theory of change underlying the KCSAP. Changes in these indicators reflect the effects of the project, and it is critical that baseline data are collected against which change can be assessed. KCSAP began implementation in 2017. A project mid-term review in 2019 provides an opportunity not only to assess change in key indicators but also to assess project implementation processes in order to improve effectiveness going forward. A final evaluation prior to project completion in 2021 will focus on assessing the results of the project and learning lessons for future interventions. The main requirements for the baseline surveys, mid-term review and final evaluation are described in the following sections.

5.1 Baseline survey

KCSAP will conduct three baseline surveys, each of which will serve different evaluation purposes:

1) General baseline: Prior to disbursement of any funds to the community level, a ‘general baseline’ will be conducted. The general baseline will be conducted in a sample of wards selected for participation in the project whereby the difference in difference (DiD or DD)⁸ approach will be used to analyze the impact of KCSAP interventions over time. The selection of wards and allocation of survey respondents between wards will aim to ensure that the general survey gives a representative picture of conditions in arid, semi-arid and high rainfall areas. Before the start of community-level activities, individual project beneficiaries will not be identifiable. However, by sampling households in project target wards, some households sampled in the general survey will later be project beneficiaries, while some may not.

The general baseline will collect information on (a) the main characteristics of households, (b) their pre-project level of engagement in activities to be promoted by the project, and (c) data required for analysis of household resilience using the RIMA-II resilience index. Information on topics (a) and (b) will inform targeting of project activities. Information on topic (c) will provide analysis to inform policy makers and project managers of the main factors related to household resilience in the different

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⁸ Difference in differences (DID or DD) is a statistical technique used in econometrics and quantitative research in the social sciences that attempts to mimic an experimental research design using observational study data, by studying the differential effect of a treatment on a ‘treatment group’ versus a ‘control group’ in a natural experiment. It calculates the effect of a treatment (i.e., an explanatory variable or an independent variable) on an outcome (i.e., a response variable or dependent variable) by comparing the average change over time in the outcome variable for the treatment group, compared to the average change over time for the control group.
agro-ecological zones covered by the project, and will provide a comparison with a RIMA-II survey conducted with a sample of registered project beneficiaries. The main variables to be collected in the general baseline are set out in the draft general baseline survey tool in Annex B.1.

2) **Beneficiary baseline:** Creation of CIGs/VMGs and enrolment of group members will take place throughout the project lifetime. County and PPP sub-projects will also be implemented over a 2-year period. Thus, beneficiaries will be identifiable on a rolling basis throughout the project implementation period. It is expected that the majority of CIGs/VMGs will be established within the 9 months of project implementation. As CIGs/VMGs are established, each member will be registered using a beneficiary baseline registration template. This information will serve as the baseline for project direct beneficiaries against which change due to project activities will be compared. The main variables to be collected in the beneficiary baseline are set out in Annex B.2.⁹

3) **RIMA-II beneficiary baseline:** The general baseline will collect data needed for analysis of household resilience. However, because it is conducted before beneficiaries are registered, it cannot be certain that beneficiaries are adequately represented in the survey sample. Therefore, a consultant will be contracted to collect data on RIMA-II variables from a sample of beneficiary households located in project wards. This baseline will be the baseline against which changes in resilience measured at project completion will be assessed.

### 5.2 Mid-term review

The mid-term review will assess:

- the relevance of the project’s PDOs
- progress towards meeting the project’s objectives and outcomes,
- the adequacy of project design to achieve expected results
- the adequacy of the implementation plan
- the adequacy of implementation and management arrangements (i.e. internal dynamics of implementing organizations, service delivery mechanisms and management practices)
- Compliance with fiduciary and safeguard elements
- Overall implementation risks, and
- Identify any lessons that could benefit the project during its lifetime.

This review will provide feedback for project management on implementation experience, and enable revisions or ‘re-tooling’ to reinforce positive impacts and mitigate adverse impacts through modifications to design and implementation.

Achievement and progress towards objectives and outcomes will be measured by indicators in the results framework and additional studies and evaluations. Outcomes for direct project beneficiaries

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⁹ Depending on requirements of the impact evaluations, additional indicators may be added to the beneficiary baseline, bearing in mind, however, that the beneficiary baseline is to be a census of registered beneficiaries and should not be too time-consuming to implement.
will be tracked in a Producer Group Tracker (Annex D.5) and results from sub-projects applying the Common performance Measurement framework (Annex D.7), which will enable comparison between household performance at mid-term and their baseline situation.

The mid-term review will also include a review of the project M&E system to assess:

- To what extent have the indicators in the results framework (including those in the PAD results framework) actually been measured?
- What weaknesses in design or indicator specification are there that need to be remedied?
- To what extent are data quality assurance and quality control activities being carried out?
- How can M&E information users’ needs be better met in the remaining project period?

### 5.3 Project completion review

The project completion review will focus on the achievement of outcomes and the sustainability of the project. The review will focus on the following fundamental questions:

- Did the project meet its development objective and its expected outcomes?
- What lessons can be learned from the implementation experience (both procedural and substantive)?

This evaluation will draw on the data on results measurement indicators, as well as quantitative and qualitative information presented in project quarterly, semi-annual and annual reports, impact evaluation and other special studies. It will also use information on beneficiary households in the Producer Organisation (PO) Tracker and Common Performance Measurement Framework (CPMF) to compare change in household status between the baseline and end of project implementation. A repeat of the RIMA-II baseline survey will be conducted to compare change in the resilience index of households in the project area.

The project completion review will result in an implementation completion report.

### 5.4 Impact evaluation and special studies

Targeted evaluations and studies can supplement the results measurement framework by providing evidence on topics or issues of high interest to project management and other stakeholders, and by providing additional evidence on topics not adequately captured in the results measurement framework. KCSAP will collaborate with DIME – the impact evaluation unit of the World Bank – to conduct targeted impact evaluations on selected topics. At the time of writing this manual, the draft concept notes for these IE studies included the following:

- ICT-based extension systems to promote CSA TIMPs
- Weather and market information services for climate adaptation and food security
- Catalysing the development of seed retail networks.

Depending on the pace of development of these IE studies, the baseline data for the IEs could be incorporated in the beneficiary baseline survey (Annex B.2).
In addition, special studies would provide valuable evidence on the following, and other topics of value to project management and stakeholders may be added:

1. **Agro-weather / market information services:** Evaluation of agro-weather services is complicated by methodological challenges. The results measurement framework tracks the number of users and beneficiary satisfaction with the services received. However, collection of reliable evidence on the effects and benefits of agro-weather service provision is more complex: information can flow from initial users to other community members, complicating control groups for comparison; impacts of use of agro-weather information can vary from year to year; the impacts occur through agricultural management decisions, which are also affected by other factors. The main questions of interest include:

   a. **Effects of access to agro-weather advisories:** How do users actually use the information accessed? How do their production or marketing practices change? What are the economic and non-economic benefits of those changes?
   
   b. **Service delivery methods:** What are the most effective information transmission mechanisms? (e.g. direct subscription, provision of information by radio, via extension agents or service providers?)

In order to ensure that these questions are addressed in scientifically robust ways, specially designed studies are required.

2. **Economic returns to micro- and sub-project investments:** Evidence on the economic returns to value chain and community investments can provide useful information to inform targeting of investments in KCSAP and other future interventions. Special studies to quantify the returns to micro- and sub-project investments would provide this information. Additional questions of value relate to the incremental benefits of micro- and sub-project investments where sub-grant beneficiaries are also beneficiaries of micro-grants. What are the incremental returns to micro-grant investments due to different types of sub-project investments?

3. **Resilience:** KCSAP theory of change (Figure 1) posits that vulnerability can decrease and resilience increase if productivity increases and agricultural product marketing lead to increased income and assets. Actual outcomes at household level depend also on the profitability of production and marketing, as well as household economic decisions over consuming income, investing in assets, accessing credit or adjusting consumption. Little is known about decisions that farmers and pastoralists make in these aspects, which limits understanding of the contribution of agronomic CSA TIMPs and value chain interventions to household welfare in a variable climate context. Special studies on household economic decisions, their links with project interventions and with welfare and resilience outcomes would provide more evidence on these questions.

4. **Measurement of resilience:** RIMA-II is the AU/CAADP mandated methodology for measuring resilience. However, it depends on a time- and resource-intensive survey and is not replicable at large scale at acceptable cost. Conceptually it also has the short-coming that it greatly focuses on household
characteristics, yet resilience is a property of broader systems. Also, as an intensive survey, the direct links between the survey and local decision-making is limited. Resilience measurement is a new topic worldwide, with no established best practice. Studies should be undertaken to explore alternative methodologies for monitoring resilience that (a) link better with local participatory processes to support local decision-making, and (b) are less costly and more replicable at large scale, while also providing robust evidence on changes in resilience. Examples include the adaptive capacity index proposed by UNIQUE and subjective approaches.

5. TIMP adoption: The KCSAP results measurement framework will provide data on adoption of TIMPs by households, by gender, and by TIMP type. Adoption and subsequent dis-adoption of CSA practices has been common elsewhere. Without reporting dis-adoption, there is therefore potential for over-estimation of adoption rates. Furthermore, it is important for research and extension agencies to understand reasons for non- and dis-adoption. While some of these questions may be covered in the socio-economic research under Component 2.1, where there are knowledge gaps not addressed in that component, special studies should be conducted. A further type of adoption question relates to validation of the inputs adopted: previous studies have identified a potential for farmers to think they are purchasing recommended varieties, but DNA fingerprinting finds that the seeds are a different variety. Component 2 leader and implementation partners may consider whether replication of this research in the KCSAP context would have value.

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6. Operationalizing Monitoring and Evaluation

6.1 Key elements of the monitoring systems
The previous sections have set out the theory of change underlying the KCSAP design, specified the main indicators for measuring project progress and effects, and the main activities and indicators for project evaluation.

With almost 100 indicators to monitor in order to track project progress and outcomes, ensure accountability and support learning among stakeholders, efficient and effective means for monitoring are needed. To achieve this, monitoring of the results chains will be implemented through 9 M&E operational workstreams (Table 15). By packaging M&E operations in workstreams, activities can be managed together that are closely related because of the people involved in data collection and reporting and the types of tools used. While each indicator has specific requirements described in the indicator reference cards (Annex C), identifying M&E workstreams also helps the national and county M&E officers to clarify the key management activities that will be critical to the success of M&E activities. Each workstream is described in the following section.

Table 15: KCSAP M&E Workstreams

<table>
<thead>
<tr>
<th>M&amp;E Workstreams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Tracking progress of county, ward and community micro- and sub-project planning</td>
</tr>
<tr>
<td>2 Tracking adoption of TIMPs through CIG/VMG development and sub-project implementation</td>
</tr>
<tr>
<td>3 Tracking improved functional performance of the national agricultural research, extension and input supply system</td>
</tr>
<tr>
<td>4 Tracking increased use of/access to risk mitigation tools</td>
</tr>
<tr>
<td>5 Tracking effective project management</td>
</tr>
<tr>
<td>6 Quality management of monitoring data</td>
</tr>
<tr>
<td>7 Aggregation of monitoring data</td>
</tr>
<tr>
<td>8 Review and evaluation</td>
</tr>
<tr>
<td>9 Reporting</td>
</tr>
</tbody>
</table>

6.2 M&E Work-streams

**WORKSTREAM 1: TRACKING PROGRESS OF COUNTY, WARD AND COMMUNITY MICRO- AND SUB-PROJECT PLANNING**

Activities in project sub-component 1.1 build capacities for participatory planning and service delivery, and are the basis for subsequent implementation of micro- and sub-project investments. Workstream 1 collects data on progress in and outcomes of capacity building, institutional development and planning at different levels (Table 16). Data for 12 of the 16 indicators in this workstream are collected by the CPCU based on documentation of activities conducted by the CPCU or reports obtained by the CPCU from the CPSC or other county agencies. These indicators track beneficiary satisfaction, progress in forming and funding CIGs, producing community and county plans, forming functional project institutions and training for project staff at county level and below. Of these indicators, #1 and #2 are collected through surveys conducted by the CPCU together with the CTAC.12 The relevant training activities are conducted with, by or under the supervision of the CPCU, and plans and grant proposals are approved by the CPSC, except for county, cross-county and PPP sub-projects, which are approved by the NPSC. Therefore, the provision of training (indicators #10 and 18), progress in community, ward and county planning (indicators #14, 19, 21 and 22), the establishment of project institutions (indicators #5, 11, 17), the approval of micro-grants (indicators #6 and 7) and convening of ward engagement activities (indicator #15 and 16) can be tracked from administrative information held by the CPCU.

Data collection on 5 of the indicators in this workstream that relate to approval of county and PPP sub-projects are the responsibility of the NPCU Component 1 leader. County, cross-county and PPP sub-grants are approved by the NTAC or NPSC, therefore, submission and approval of county, cross-county and PPP sub-grants (indicators #21, 22, 23, 24, 27) can be tracked from administrative information obtained by the NPCU Component 1 leader. The NPCU Component 1 leader has overall responsibility for capacity building of agencies providing advisory service support – including SPs, CTDs, sub-CTDs and CPCU staff. Change in the technical advisory capacity of extension workers is tracked by the NPCU component 1 leader through capacity assessments conducted by a contracted consultant.

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12 During these surveys, the CPCU and CTAC also verify the progress of service providers in meeting contract targets, which also serves as a cross-check against productivity and marketing data submitted by service providers.
Table 16: Indicators in Workstream 1

<table>
<thead>
<tr>
<th>#</th>
<th>Indicators</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Beneficiaries’ satisfied with consideration of their views and needs in the investment planning process</td>
<td>CPCU/CTAC quarterly beneficiary verification surveys</td>
</tr>
<tr>
<td>2</td>
<td>Beneficiaries satisfied with relevance, timeliness and effectiveness of TIMP advisory services received</td>
<td>CPCU/CTAC quarterly beneficiary verification surveys</td>
</tr>
<tr>
<td>3</td>
<td>Extension workers’ technical advisory capacity improved</td>
<td>Consultant to NPCU C1L</td>
</tr>
<tr>
<td>4</td>
<td># of CIGs/VMGs established</td>
<td>CPCU inspect cert of registration</td>
</tr>
<tr>
<td>5</td>
<td># of proposals for CIG/VMG micro-projects registered</td>
<td>CPCU</td>
</tr>
<tr>
<td>6</td>
<td># of CIG/VMG micro-project grants approved</td>
<td>CPSC minutes</td>
</tr>
<tr>
<td>7</td>
<td># no of person training days delivered for sub-county staff</td>
<td>CPCU training reports</td>
</tr>
<tr>
<td>8</td>
<td># of functional CDDCs</td>
<td>CPCU uses CDDC tracker</td>
</tr>
<tr>
<td>9</td>
<td># of CIAPs ratified</td>
<td>CPCU baraza reports</td>
</tr>
<tr>
<td>10</td>
<td># of ward citizen engagement meetings held</td>
<td>CPCU minutes</td>
</tr>
<tr>
<td>11</td>
<td># of functional CVCDCs</td>
<td>CPCU uses CVCDC tracker</td>
</tr>
<tr>
<td>12</td>
<td># of participants attending ward citizen engagement meeting (by gender)</td>
<td>CPCU minutes</td>
</tr>
<tr>
<td>13</td>
<td># of county sub-project proposals received</td>
<td>NPCU</td>
</tr>
<tr>
<td>14</td>
<td># of county sub-projects approved</td>
<td>NPCU</td>
</tr>
<tr>
<td>15</td>
<td># of cross county sub-project proposals received</td>
<td>NPCU</td>
</tr>
<tr>
<td>16</td>
<td># of Pactys matching grants approved</td>
<td>NPCU</td>
</tr>
</tbody>
</table>

Most of the indicators in Workstream 1 are monitored using data arising in the process of project capacity building and planning activities. From the perspective of management of this M&E workstream, it will be important for the NPCU M&E officer to work with the Component 1 leader and CPCUs to ensure that procedures for collection of data on these indicators are integrated into workflow procedures at project and CPCU levels to ensure that staff are clear on their responsibilities for data collection and that documents containing relevant data (e.g. CPSC or NTAC meeting minutes) are copied to the staff with responsibilities for capturing the related M&E data.
WORKSTREAM 2: TRACKING ADOPTION OF TIMPs THROUGH CIG/VMG DEVELOPMENT AND SUB-PROJECT IMPLEMENTATION

Workstream 2 tracks the adoption of TIMPs and the effects on project beneficiaries due to implementation of CIG/VMG micro-projects and implementation of county and PPP sub-grants. Some indicators (e.g. agricultural assets brought under TIMPs, changes in productivity, GHG emission intensity and value of agricultural product sold) are common to CIG/VMG micro-projects and county or PPP sub-grants, while other indicators differentiate between beneficiaries of grants made through the different Component 1 investment windows. Different tools are therefore used to track the progress and effects of different investment windows, with a Common Performance Reporting Framework (Annex D.7) for county and PPP sub-grants to ensure that complete data on project beneficiaries is collected. This workstream is therefore further sub-divided into Workstream 2A focusing on CIG/VMG micro-projects, 2B covering county and PPP sub-grants, and 2C covering select indicators that monitor effects common to different investment types. The aggregation of data on common indicators across CIG/VMG, county and PPP sub-grants is described in Workstream 7.

Table 17: Indicators in Workstream 2

<table>
<thead>
<tr>
<th>#</th>
<th>Indicators</th>
<th>Main responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>Change in productivity of selected agricultural commodities supported by the project</td>
<td>SPs (using PO tracker) or county &amp; PPP sub-project grantees following CPMF</td>
</tr>
<tr>
<td>29</td>
<td>Change in net GHG emissions per unit (kg) of product produced for selected agricultural commodities</td>
<td>Consultant</td>
</tr>
<tr>
<td>30</td>
<td>Value of agricultural output of targeted agricultural products sold (KSh)</td>
<td>SPs (using PO tracker) or county &amp; PPP sub-project grantees following CPMF</td>
</tr>
<tr>
<td>31</td>
<td>Producer organisation development</td>
<td>SPs using PO tracker</td>
</tr>
<tr>
<td>32</td>
<td>Targeted beneficiaries in CIGs/VMGs who have adopted at least one TIMP promoted by the project</td>
<td>SPs (using PO tracker) or county &amp; PPP sub-project grantees following CPMF</td>
</tr>
<tr>
<td>33</td>
<td>Head of livestock brought under TIMPS as a result of the project</td>
<td>SPs (using PO tracker) or county &amp; PPP sub-project grantees following CPMF</td>
</tr>
<tr>
<td>34</td>
<td>Area of land (ha) brought under TIMPs as a result of the project</td>
<td>SPs (using PO tracker) or county &amp; PPP sub-project grantees following CPMF</td>
</tr>
<tr>
<td>35</td>
<td>Client-days of training for CIG/VMG members provided on TIMPS</td>
<td>trainer reports to CPCU</td>
</tr>
<tr>
<td>36</td>
<td>Number of TIMPs promoted</td>
<td>trainer reports to CPCU</td>
</tr>
<tr>
<td>37</td>
<td>% of CIG/VMG micro-grant projects successfully completed</td>
<td>CSC to CPCU</td>
</tr>
<tr>
<td>38</td>
<td># of beneficiaries in CIGs and VMGs reached with agricultural / animal husbandry assets or services</td>
<td>SPs using PO tracker</td>
</tr>
<tr>
<td>39</td>
<td>% of county matching grant projects successfully completed</td>
<td>Grantee uses CPMF</td>
</tr>
<tr>
<td>40</td>
<td>Infrastructure rehabilitated or constructed by county sub-grants</td>
<td>Grantee uses CPMF</td>
</tr>
<tr>
<td>41</td>
<td># of beneficiaries reached with agricultural /</td>
<td>Grantee uses CPMF</td>
</tr>
</tbody>
</table>
### Workstream 2A: Monitoring CIG/VMG micro-projects

The creation of CIGs/VMGs and the approval and completion of related micro-projects are covered in Workstream 1. Workstream 2.A tracks:

- the development of CIGs/VMGs as organisations
- their membership (beneficiaries)
- activities conducted by these groups (including micro-projects implemented) and
- changes in agricultural practices and outcomes at household level (i.e. TIMP adoption and productivity).

Where project beneficiaries are members of project-registered CIGs, three monitoring tools are used. Firstly, indicators #28, #30-34 and #38 are tracked through the Producer Group Tracker. A template for the Producer Group Tracker is given in Annex D.5. The tracker records two main types of information:

1. **Producer organisation development**: The Producer Group Tracker records information about the status of each group, including:
   - organisational structures, such as management committees (which are pre-requisites for grant eligibility) and their gender composition;
   - organisational functioning, including implementation of grants, technical assistance support, training to members, collective marketing, savings and credit activities etc.
   - organisational performance, including business services provided to members and any collective enterprises.

2. **Production and marketing by group members**: The Producer Group Tracker records information about agricultural production by group members, including:
   - Adoption of TIMPs by household members (disaggregated by gender) and land and livestock assets under improved management
   - Crop and livestock yields
   - Value of marketed agricultural surplus.
The Producer Group Tracker is administered by Service Providers or CTDs (where there are no contracted service providers). Through implementing the PO tracker, not only is monitoring data obtained and reported to the CPCU, but SPs and CTDs – who are the direct providers of advisory services – become familiar with the organisational development status of the producer organisations they are serving as well as the agricultural practices of their members. They can also give groups and members feedback based on analysis of the data collected, which therefore supports their provision of advisory services. Because some indicators (e.g. yields) may be linked to SP contracts, the data collected through the Producer Group Tracker is not used to assess contract fulfillment. Moreover, the accuracy of data is cross-checked through sample surveys conducted by CPCUs together with the CTAC as part of the verification of achievement of service providers’ contracted targets (see Workstream 1).

Secondly, indicators #35 and #36 (CIG training days on TIMPs and number of TIMPs promoted) are directly reported in monthly progress reports from SPs or CTDs to the CPCU. Thirdly, the number of grants completed by CIGs and VMGs is tracked through the Community Score Card (CSC) method (see Annex D.6), which is administered by the service providers (or CTDs) assisting in implementing the grants approved under Project Sub-components 1.2 or 1.3.

**Workstream 2.B: Monitoring County and PPP sub-grants:** Several indicators (i.e., indicators #28, 29, 30, 33, 34) are relevant to both CIG/VMG members and to beneficiaries of county- and PPP sub-grants. While the PG tracker is used to collect data on CIG/VMG members in Workstream 2.A, separate tools that are harmonized with the PG tracker should be used to collect data on productivity, value of agricultural sales, and assets brought under TIMPs due to county- or PPP sub-grants. This is done through the Common Performance Measurement Framework in Annex D.7, where mandatory indicators for county and PPP sub-grants are set out. County sub-grants under Window II and PPP sub-grants under Window III will also aim to promote adoption of TIMPs. The types of projects are more diverse – some will mainly focus on infrastructure investment, while others may include a strong focus on advisory service provision. Tracking beneficiaries and their outcomes from these more diverse types of project is more challenging. The indicators related to county and PPP sub-projects will be collected in diverse ways, depending on the specific project context, that are aligned with the sub-project Common Performance Measurement Framework. In each case, the indicators in this workstream are measured by each sub-project grantee in accordance with the Common Performance Measurement Framework, and results are reported to the CPCU or NPCU (depending on specific arrangements for each contract).

**Workstream 2.C: Monitoring effects on GHG intensity**

Indicator #29 (GHG intensity of select agricultural products) will be implemented through a consulting contract. For each agricultural product, the consultant will sample project beneficiaries producing that product irrespective of whether they are CIG/VMG members or beneficiaries of county or PPP sub-grants.
For different agricultural products, different methodologies will be used to track change in GHG emissions per unit product. For field crops, the Cool Farm Tool will be used to estimate GHG intensity (kg CO₂e / kg yield) of production for the target commodity crops. For livestock, the GHG intensity of dairy production will be estimated using the Gold Standard methodology for Smallholder Dairy.

For field crops, the beneficiary baseline will identify households working on different crop value chains. The beneficiary baseline record of household yields can be used to select a sample of household’s representative of the mean, lower quartile and upper quartile of yields. A detailed survey of production practices will collect data on the parameters required by the CFT (see Annex E) to estimate the GHG intensity of production. Even though at this stage the households will already be registered to participate in the project, the survey will use 1 year recall data, so can represent production practices prior to the project. The survey will be repeated at mid-term and before project completion to estimate change in GHG emission intensity for households producing at the mean, lower quartile and upper quartile of yields. This will provide an indication of change in GHG intensity for the average household as well as for households at the lower and upper range of productivity.

For the GHG intensity of dairy production, a regionally representative survey will be conducted to collect the data required for estimation of GHG intensity of dairy production using the Gold Standard methodology (see Annex E). Analysis of this survey will result in a regionally-representative relationship between GHG intensity and milk yield. Once this relationship has been established, change in GHG intensity during the project period can be estimated simply using milk yield records captured annually in the Producer Group Tracker (Workstream 2A).

Implementation of this workstream is done through a consulting contract. Conduct of the field crop and dairy surveys and GHG quantification will be contracted to consultants at baseline, mid-term and before project completion. The NPCU will assist in providing access to beneficiary baseline data to enable sampling. Results of the quantification will be reported to NPCU at baseline, mid-term and before project completion.

**ATTENTION:** For Workstream 2, the effective management of M&E will require attention to the following:

- **Deployment of the Producer Group Development tracker:** For all CIGs/VMGs and their members, data on organisational development and changes occurring at household level will be tracked through the PG Development Tracker (Annex D.5). This tool is administered by SPs and CTDs (where there is no SP) and is the primary source of monitoring data on CIG/VMG members. The templates in Annex D.5 can be set up in digital data collection tools that are interoperable with the systems for analyzing household level data and with the MIS. Ensuring that IT solutions are designed and implemented to facilitate this interoperability will be critical to the efficient generation, processing and reporting of M&E data. Data quality checks can be in-built into the data collection tools and data analysis procedures (see Workstream 6). The capacities of SPs and CTDs to use these tools will also be critical to ensure.
• **Implementing the Common Performance Measurement Framework (CPMF):** The Common Performance Measurement Framework (Annex D.7) is intended to ensure that grantees implementing county and PPP sub-projects also collect at least a minimum set of data on project beneficiaries and the effects of the sub-grant interventions. The CPMF should be integrated into county and PPP sub-grant contracts. How each sub-grant implements the CPMF will vary on a case by case basis. For example, private companies or cooperatives directly providing advisory services or monitoring farmers’ field level production practices already have systems in place to track changes at household level, and key indicators at this level can be integrated into their existing monitoring systems. Other companies or cooperatives that do not have existing systems may prefer to sub-contract monitoring and evaluation to specialist consultants. In either case, sub-grant contracts must include the mandatory requirements set out in the CPMF, budgets for M&E activities, and for M&E capacity building where needed.

• **Data aggregation:** Several indicators are tracked for project-registered CIG/VMG members and for beneficiaries of sub-grants who are not CIG/VMG members. Data aggregation must explicitly account for both types of beneficiary while ensuring that there is no double-counting of beneficiaries. These issues are discussed further in Workstream 7 below. The registration of project beneficiary households will play a key role in distinguishing between beneficiaries and non-beneficiaries and enabling automated aggregation without double counting.

**WORKSTREAM 3: TRACKING IMPROVED FUNCTIONAL PERFORMANCE OF THE NATIONAL AGRICULTURAL RESEARCH, EXTENSION AND INPUT SUPPLY SYSTEM**

This workstream contains all but one of the indicators related to Results Chain 2. For each of these indicators, monitoring data is reported by a contracted agency to the NPCU Component 2 Leader, who enters indicator values into the PMIS. Grouping all these indicators in one workstream enables the Component 2 leader and NPCU M&E officer to manage monitoring of these indicators together.

Specific project activities to be monitored will be contracted to different agencies. For example, for indicators #47-59, which all relate to Results Chain 2A, the data source is the lead contract institution on Collaborative Research Grants. The data is therefore reported through Collaborative Research Grant Quarterly Reports to the Component 2 leader. Activities monitored with indicators #46, 60-61, 63-68 and 71-76 will be implemented by different contracted agencies, but in each case the contracted agency submits monitoring data in their quarterly progress report. Indicators #69 and #70 are also collected by contracted consultants who report the monitoring results to the Component 2 leader. Among all the Results Chain 2 indicators, only indicator #62 (number of seed CIGs established) is not included in this workstream, because that indicator is collected using the same method used for collecting data on establishment of other CIGs (i.e. indicator #5).
<table>
<thead>
<tr>
<th>#</th>
<th>Indicators</th>
<th>Main responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td># of NARS institutions using the CSA M&amp;E system</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>47</td>
<td># of TIMPs formally released</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>48</td>
<td># of research fairs held</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>49</td>
<td># of research &amp; innovation platforms for inter- and intra-institutional</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td></td>
<td>information, exchange/transfer</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td># of ToT training person days delivered</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>51</td>
<td># of trainees trained through ToTs</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>52</td>
<td>% of formally released TIMPS that are promoted in ToT courses</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>53</td>
<td>% of planned value of procurement of equipment completed</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>54</td>
<td># of post-graduate degree and short-term (PhD, MSc, short-course)</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td></td>
<td>technical trainings completed</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td># of collaborative research grant projects completed</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>56</td>
<td># of farmers participating in on-farm TIMP trials</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>57</td>
<td># of TIMPs tested through on-farm trials, share of which validated</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>58</td>
<td># of ToT manuals on TIMPs produced and published</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>59</td>
<td># curricula developed and launched</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td>60</td>
<td>Volume of CSA inputs produced by crop seed, breed stock and fingerlings</td>
<td>contracted institution to CL2</td>
</tr>
<tr>
<td></td>
<td>producers supported by the project</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td># of community-based seed producers registered / certified</td>
<td>CL2 OR CPCU</td>
</tr>
<tr>
<td>62</td>
<td># of seed CIGs established</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td># of seed CIGs receiving technical assistance / support via the project</td>
<td>service/finance providers</td>
</tr>
<tr>
<td>64</td>
<td># of seed production units receiving technical assistance/support via the</td>
<td>service/finance providers</td>
</tr>
<tr>
<td></td>
<td>project</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td># of meetings held to support registration / certification system</td>
<td>CL2</td>
</tr>
<tr>
<td></td>
<td>for community-based seed producers</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td># of meetings held to support NARS germplasm licensing and transfer policy</td>
<td>CL2</td>
</tr>
<tr>
<td>67</td>
<td># of meetings held to support seed quality assurance standards</td>
<td>CL2</td>
</tr>
<tr>
<td>68</td>
<td># of meetings held to support establishment of Public-Private Dialogue on</td>
<td>contracted agency</td>
</tr>
<tr>
<td></td>
<td>seeds</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>% of targeted beneficiaries satisfied with access to seed, fingerling</td>
<td>Consultant</td>
</tr>
<tr>
<td></td>
<td>and breed stock inputs</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td># of wards where priority CSA seeds (crop varieties, livestock breed,</td>
<td>consultant</td>
</tr>
<tr>
<td></td>
<td>fingerlings) promoted as part of the CIAP are predominantly accessible by</td>
<td></td>
</tr>
<tr>
<td></td>
<td>farmers</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td># of input dealers benefiting from revolving funds and credit guarantee</td>
<td>contracted agency</td>
</tr>
<tr>
<td></td>
<td>schemes</td>
<td></td>
</tr>
<tr>
<td>Indicator</td>
<td>Description</td>
<td>Source</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>--------</td>
</tr>
<tr>
<td>72</td>
<td># of input dealers and wholesalers using mobile-or web-based platforms supported by the project</td>
<td>contracted agency</td>
</tr>
<tr>
<td>73</td>
<td># CIGs/VMGs/POs supported to develop seed sales/distribution networks</td>
<td>contracted TA providers</td>
</tr>
<tr>
<td>74</td>
<td># of input dealers trained and certified</td>
<td>certifying agency</td>
</tr>
<tr>
<td>75</td>
<td># of revolving fund and credit guarantee schemes established</td>
<td>contractors</td>
</tr>
<tr>
<td>76</td>
<td># of mobile- or web-based platforms launched to link input supply chain actors</td>
<td>contractors</td>
</tr>
</tbody>
</table>

**WORKSTREAM 4: TRACKING INCREASED USE OF / ACCESS TO RISK MITIGATION TOOLS**

All of the indicators in this workstream relate to Results Chain 3 (Table 19). They are also similar in that **each indicator is reported by a contracted agency to the NPCU Component 3 Leader**, who enters indicator values into the PMIS. Grouping all these indicators in one workstream enables the Component 3 leader and NPCU M&E officer to manage monitoring of these indicators together.

Specific project activities to be monitored will be contracted to different agencies. For example, equipment may be installed by KMD; the agro-weather platform and delivery of integrated agro-weather and market information to KALRO; MIS related activities to the MOAI agricultural market information department; and insurance related activities to the MOAI agricultural insurance unit. Although there are numerous contract partners, all the indicators in this workstream can be reported by the contractors to the Component 3 Leader either in quarterly progress reports (all indicators except #77 and #78), or through submission of special evaluation and survey reports (indicators #77 and #78).

Indicators #77 and #78 – numbers of users and users’ satisfaction with agro-weather advisories – are to be monitored through special evaluations and other surveys because:

(a) the distribution of potential users is much broader than the scope of other data collection tools in the M&E system, which focus on CIG members or other beneficiaries in project target wards; and

(b) There are different technical challenges to tracing the users of information disseminated with different media and the effects of this on users’ behaviour. For example, registered users of SMS services can be traced using data on the SMS platform, but the flow of information from registered users (e.g. SPs) to other beneficiaries/users needs to be traced using other data sources.

Therefore, it is proposed that these two indicators are assessed based on data collected by specialized agencies through special evaluation studies. These evaluation studies may use data from baseline or other household surveys but should not be limited to the sample households represented in those data sources.
Table 19: Indicators in Workstream 4

<table>
<thead>
<tr>
<th>#</th>
<th>Indicators</th>
<th>Main responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>% of beneficiaries satisfied with relevance, timeliness and usefulness of agro-weather-market advisories received</td>
<td>KALRO or contractor</td>
</tr>
<tr>
<td>78</td>
<td># of users receiving integrated agro-weather information services and market information services</td>
<td>KALRO or contractor</td>
</tr>
<tr>
<td>79</td>
<td>Policies and mechanisms for data sharing in place</td>
<td>KALRO</td>
</tr>
<tr>
<td>80</td>
<td>Quarterly user feedback reports published</td>
<td>KALRO</td>
</tr>
<tr>
<td>81</td>
<td># of new and refurbished agro- and hydro-meteorological facilities</td>
<td>Contractors</td>
</tr>
<tr>
<td>82</td>
<td># of new and refurbished agro- and hydro-met centres</td>
<td>Contractors</td>
</tr>
<tr>
<td>83</td>
<td># of Agromet Bulletins published</td>
<td>KMD</td>
</tr>
<tr>
<td>84</td>
<td>of value chains covered in KALRO agro-weather platform</td>
<td>KALRO</td>
</tr>
<tr>
<td>85</td>
<td># of counties covered in KALRO agro-weather platform</td>
<td>KALRO</td>
</tr>
<tr>
<td>86</td>
<td># of counties covered in MOAI MIS</td>
<td>MOAI market info dept.</td>
</tr>
<tr>
<td>87</td>
<td># of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed</td>
<td>Contractors</td>
</tr>
<tr>
<td>88</td>
<td># of new or improved crop and livestock insurance products available on the market</td>
<td>MOAI AIU</td>
</tr>
<tr>
<td>89</td>
<td># of sensitization forums conducted by MOAI to promote insurance</td>
<td>MOAI AIU</td>
</tr>
<tr>
<td>90</td>
<td># of beneficiaries attending sensitization forums conducted by MOAI AIUs (by gender)</td>
<td>MOAI AIU</td>
</tr>
<tr>
<td>91</td>
<td># of homogeneous production zones maps developed</td>
<td>Contractors</td>
</tr>
<tr>
<td>92</td>
<td># of crop cutting experiments being implemented</td>
<td>Contractors</td>
</tr>
<tr>
<td>93</td>
<td># of monthly forage availability updates disseminated</td>
<td>Contractors</td>
</tr>
<tr>
<td>94</td>
<td># of counties with historical agricultural data digitized</td>
<td>Contractors</td>
</tr>
<tr>
<td>95</td>
<td># of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed</td>
<td>Contractors</td>
</tr>
</tbody>
</table>

Workstream 5: Tracking effective project management

Results Chain 4 identifies 11 indicators related to monitoring of project management operations and capacities (Table 20). Data on these indicators are all obtained by CPCUs or NPCUs and reported by CPCUs and NPCUs. For indicators #4, 8, 9, 12 and 13, #25-26 and 98, the NPCU collects the data from the PMIS and the Grievance Redress documentation system. For indicators #99-106 data is collected by CPCU and NPCU M&E officers on the basis of ongoing operations, plans and assessments conducted at each level.
WORKSTREAM 5: TRACKING EFFECTIVE PROJECT MANAGEMENT

Table 19: Indicators in Workstream 4

<table>
<thead>
<tr>
<th>#</th>
<th>Indicators</th>
<th>Main responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td># of postgraduate degree and short term technical trainings completed</td>
<td>Contractors</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of PCUs with updated training plans</td>
<td>Contractors</td>
</tr>
<tr>
<td>90</td>
<td>Percentage of MOAI AIUs (by gender) that have been registered and trained</td>
<td>Contractors</td>
</tr>
<tr>
<td>91</td>
<td># of MOAI AIUs attended training programs</td>
<td>Contractors</td>
</tr>
<tr>
<td>92</td>
<td># of new and improved crop and livestock insurance products</td>
<td>Contractors</td>
</tr>
<tr>
<td>93</td>
<td># of new and refurbished agro market info dept.</td>
<td>Contractors</td>
</tr>
<tr>
<td>94</td>
<td># of users receiving integrated agro market advisories</td>
<td>Contractors</td>
</tr>
<tr>
<td>95</td>
<td>% of beneficiaries satisfied with relevance of agro market advisories</td>
<td>Contractors</td>
</tr>
<tr>
<td>96</td>
<td>Satisfactory quarterly project interim financial and progress</td>
<td>CPCUs, NPCU</td>
</tr>
<tr>
<td></td>
<td>monitoring reports submitted within 45 days of end of the previous period</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>% achievement of targets in the PAD results framework</td>
<td>NPCU</td>
</tr>
<tr>
<td>98</td>
<td>% of grievances registered related to delivery of project</td>
<td>NPCU</td>
</tr>
<tr>
<td></td>
<td>benefits at community, ward and county levels that are actually addressed</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>% of NPCU/CPCU staff with performance contracts in which</td>
<td>CPCUs, NPCU</td>
</tr>
<tr>
<td></td>
<td>expected results are fully linked to the project deliverables</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>Percentage of PCUs that have reviewed and updated annual plans</td>
<td>CPCUs, NPCU</td>
</tr>
<tr>
<td>101</td>
<td>% of trainings implemented as per the training plan</td>
<td>CPCUs, NPCU</td>
</tr>
<tr>
<td>102</td>
<td>% of county annual workplan &amp; budgets submitted on time</td>
<td>CPCUs, NPCU</td>
</tr>
<tr>
<td>103</td>
<td>% of national annual work plan and budgets submitted on time</td>
<td>NPCU</td>
</tr>
<tr>
<td>104</td>
<td>Operational PMIS in place</td>
<td>CPCUs, NPCU</td>
</tr>
<tr>
<td>105</td>
<td># of counties implementing the project M&amp;E manual satisfactorily</td>
<td>CPCUs, NPCU</td>
</tr>
<tr>
<td>106</td>
<td>Grievance receipt and redress documented in PMIS</td>
<td>NPCU</td>
</tr>
</tbody>
</table>

WORKSTREAM 6: DATA QUALITY MANAGEMENT

Good quality data is essential to ensuring a complete and credible evidence base for KCSAP’s results. The quality of monitoring data can be assessed against five data quality indicators (Table 21).
Table 21: Indicators of data quality

<table>
<thead>
<tr>
<th>Data Dimension</th>
<th>Operational Definition</th>
</tr>
</thead>
</table>
| Validity       | • Are the indicators defined well and are data reported in an appropriate format?  
• Do the indicators accurately represent reality?  
• Do they have a verifiable source? Is all necessary data present?  
• Are the indicators sufficient to characterize and/or measure the results? |
| Reliability    | Do data values give conflicting information? Is there:  
1. **Measurement Error** (for surveys only): Were the questions in the survey/questionnaire clear, direct, and easy to understand? Was an appropriate sampling frame used? Were enumerators well trained?  
2. **Transcription Error**: Is there a process to limit transcription error? Have data errors been tracked to their original source and mistakes corrected?  
3. **Consistency**: Is the data gathering process (including instrument and sampling process) same over time and across Projects/regions? Is the data internally consistent (totals equal sum of parts, etc.)?  
4. **Quality Control**: What are the procedures (data collection, maintenance and process) to guard against bias? Are procedures reviewed periodically? Are there random checks at each stage?  
5. **Transparency**: Are the procedures in writing and are problems reported? Do data values give conflicting information? |
| Timeliness     | Data are timely when they are up-to-date and when the information is available on time. Practicality is also included under this dimension: Is the collection of data for the indicator a reasonably viable matter? Is it cost effective? Are there reasons that make data collection non-feasible? |
| Precision      | This means that the data have sufficient detail. Is the margin of error reported? Is the margin of error less than expected change in the indicator? Is the margin of error acceptable for decision-making, given cost/benefit? Does the target include margin of error? |
| Integrity      | Are data subject to political and/or personal manipulation? Is there independence in key data collection, management and assessment? Is there an impartial review of entire data gathering process? Is there integrity (between records)? Are data maintained in accordance with international or national confidentiality guidelines? |

Some aspects of data quality are determined by the nature of the indicators themselves. Indicators can be reviewed and definitions or data collection and management procedures revised to improve data quality. Other aspects of data quality are determined by the procedures for data management. Therefore, in KCSAP, the following activities should be integrated into KCSAP’s M&E processes.

1. **Making full use of the strengths of digital tools for data collection, transmission and management**: Digital survey tools are increasingly used to reduce errors and time costs associated with the use of paper survey forms. Digital survey tools can provide data collectors with pre-prepared survey templates; they can include in-built functions to ensure completeness and validity of

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data; and can be used to automate data transmission, e.g. uploading of survey results to a centralized server. In KCSAP, data collection for beneficiary household registration and beneficiary baselines, the Producer Group Tracker and other tracker tools, and the beneficiary verification survey can all be set up using such tools, with functions in-built to ensure data quality. Some of these tools also work offline, so they are useful in areas with limited connectivity, such as much of rural Kenya.

2. Integrating data quality checks into routine M&E procedures: Not all M&E data can be collected and transmitted in a fully digital way. Work flows will inevitably have hotspots where risks such as incomplete data, transcription errors or untimely submission occur. It is good practice to map M&E work flows, highlight processes where specific risks occur, and to integrate data quality checks and other measures in order to minimize such risks. One particular risk is that the Producer Group Tracker is to be implemented by SPs, but SP contracts may give them incentives to inflate productivity or household income data. To address this risk, CPCUs together with CTACs will conduct a quarterly survey to verify progress against the targets set out in SPs’ contracts (most likely to include productivity, marketed value and/or income indicators). This survey will enable cross-checking of data submitted by SPs, while also enabling CPCUs and CTACs to collect beneficiary feedback on satisfaction with their roles in planning and with advisory services received (indicators #1 and #2).

3. Developing and implementing an ongoing programme of activities to develop capacities for M&E: KCSAP should implement M&E capacity development activities throughout the project lifetime. Training in M&E and specific task-related skills will be essential to ensure that staff and stakeholders are fully equipped to perform their M&E tasks. Processes for the management of M&E activities, such as planning, coordination, review and learning events, as well as management procedures, such as the use of templates, checklists and databases are also essential to support staff and stakeholders to work effectively and efficiently. The project should develop, implement and review on an ongoing basis activities to build both individual and systemic capacities for good quality M&E.

4. Annual review of M&E performance: An annual review of M&E performance by all units (NPCU and components at national level and all CPCUs) should be conducted to assess the quality of M&E procedures and the resulting data. This review can be undertaken as a self-assessment, and should help M&E staff to develop action plans for M&E improvement. Templates for M&E performance assessment are given in Annex G.

The NPCU M&E Officer, working in collaboration with the M&E Working Group (see Annex F) shall be responsible for ensuring that data collection procedures integrate data quality assurance mechanisms, for developing and implementing a programme of capacity development activities, and for coordinating the annual M&E performance review.
**WORK STREAM 7: DATA AGGREGATION**

Results measurement using the indicators established in the PAD results framework requires multiple levels of data aggregation before progress and results can be reported. Aggregation of the following types of information will be required for tracking and measuring project results.

1. Total number of farmers reached with assets or services supported by the project
2. Changes in household characteristics, production, market, risk mitigation and resilience behavior
3. Human resource capacity development results
4. Seed production and distribution
5. Infrastructure and equipment procurement and installation
6. Grievances redress

### 1. Total number of farmers reached with agricultural assets or services as a result of the project

Overall, there are three groups of project beneficiaries that need to be aggregated for reporting on this indicator (see Figure 12 below):

1) All farmers/pastoralists that are members CIGs or VMGs in the selected project wards;
2) Additional farmers reached with agricultural assets or service through county or cross-county sub-projects in non-project wards;
3) Additional farmers/pastoralists reached with agricultural assets or service through PPPs in non-project wards.

![Figure 12: Total number of farmers reached with agricultural assets or services](image)

To arrive at an aggregate number of total farmer beneficiaries reached with agricultural assets and services any double counting of beneficiaries that receive benefits through more than one investment window must be avoided. This will be achieved in the following way:
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Figure 12: Total number of farmers reached with agricultural assets or services

To arrive at an aggregate number of total farmer beneficiaries reached with agricultural assets and services any double counting of beneficiaries that receive benefits through more than one investment window must be avoided. This will be achieved in the following way:
- The unique farmer registration ID of all ward farmers targeted by Window 1 will be instrumental for filtering out those farmer beneficiaries receiving benefits through more than one window, and for making sure that they are only counted one time in the total farmer beneficiary count.
- PPP beneficiaries in non-project wards will be defined by the membership of producer organizations entering into a PPP.
- The number of beneficiaries of county sub-projects in non-project wards can be estimated based on population statistics of communities benefitting from a sub-project intervention.

2. Changes in household characteristics, production, marketing, risk mitigation and resilience behavior

Many of the results framework indicators describe individual household behavior in terms of their understanding, preferences and use of discrete agricultural inputs and practices, produced yields, marketing decisions of production surplus (if any), the use of information sources, intra-household decision-making processes etc. Each household is different in its behavior, but through the aggregation of observations certain patterns and trends become evident. This is important for evidence-based results monitoring and for making timely improvements to intervention.

The units of analysis, i.e., the levels of aggregation to be applied to households, are
- gender of household head
- CIG/VMG membership
- ward location
- county location
- agro-ecological zone
- total project area

All indicators where the primary unit of observation is the household will need to undergo an aggregation process that requires compliance with a common protocol by the decentralized project coordination units, in order to ensure adequate reliability of data once aggregated. The KCSAP Working Group on M&E is the principal owner of the protocol(s), and will be responsible for their design, compliance and for making improvements during implementation.

Table 22: Overview of the general protocol for data aggregation

<table>
<thead>
<tr>
<th>Harmonization Protocol</th>
<th>Source of guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of indicators and measurement units</td>
<td>M&amp;E Manual Annex C indicator reference cards</td>
</tr>
<tr>
<td>Survey design</td>
<td>Guideline on sampling to be developed by M&amp;E Working Group</td>
</tr>
<tr>
<td>o Sample selection frame</td>
<td></td>
</tr>
<tr>
<td>o Survey instruments (i.e., questionnaire)</td>
<td></td>
</tr>
<tr>
<td>o Enumerator manual</td>
<td></td>
</tr>
</tbody>
</table>
3. Human resource and organizational capacity development results

Human resources capacity development is planned across all project components and for different stakeholder groups (e.g. farmers, other community members, staff of service providers). Different training methods with different depths of skill development will be rolled out. The following are general categories that will help to systemize the aggregation of HR capacity development results.

Principal data sources will be (i) digitized lists of participants with names (and farmer registration ID number); (ii) the agenda of the training event (indicating the length of the training); (iii) exit interviews or feedback questionnaires (for tracking changes in trainees perceived confidence levels).

Table 23: Aggregation of human resources capacity development results

<table>
<thead>
<tr>
<th>Sub-Component</th>
<th>Aggregation steps</th>
<th>Supporting evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual capacity development of farmers,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. number of farmers trained on TIMPS</td>
<td>1.1, 1.2, 1.3</td>
<td>a. Aggregation by using the unique farmer registration ID</td>
</tr>
<tr>
<td>b. person days of training on TIMPS</td>
<td></td>
<td>b. $\sum$ of TIMPS related training event $1_x \times$ length of training event $1_x \times$ number of participants at event $1_x$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>List with names of farmers and registration ID at each ward</td>
</tr>
<tr>
<td></td>
<td></td>
<td>agenda of each training event</td>
</tr>
</tbody>
</table>
2. Individual capacity development of service staff (i.e., NARS, public and private extension, seed multiplication units, weather stations),
   
   a. Training of trainers (ToT): # of individuals, # of client days of training
   
   b. # of short-term trainings days (technical training)
   
   c. # of post-graduate degrees completed - PhD, Master

   a. sum of individuals trained at each institution;
   
   b. sum of ToT training events 1-y* length of training event 1-y* number of participants at event 1-y
   
   c. sum of all scholarship holders with completed degree

3. Human resource and organizational capacity development results

   Human resources capacity development is planned across all project components and for different stakeholder groups (e.g. farmers, other community members, staff of service providers). Different training methods with different depths of skill development will be rolled out. The following are general categories that will help to systemize the aggregation of HR capacity development results.

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   Table 23: Aggregation of human resources capacity development results

4. Seed production and distribution

   Indicators for monitoring aggregated seed production and distribution are the following:

   1) Number of seed production units receiving technical assistance/support via
      - Credit-guarantee scheme
      - Technical Assistance for seed retailers and community-based organizations
      - Revolving fund for community-based seed production units

   2) Increased production of climate-smart agricultural inputs by seed and breed stock producers supported by the project:
      - Early generation seed (tons)
      - Certified seed (tons)
      - Livestock parent stocks (heads)

   3) # of CSA seed varieties, fingerling and breed stocks promoted by project that can be accessed by farmers and pastoralists in targeted project areas

   Attention: As part of the data aggregation process the following needs to be considered (Table 24):
- seed production units receiving support through two or more of the three mechanisms need to be identified/marked to be counted only once;
- aggregation of seed production volumes need to be done first by crop type, and secondly by climate-smart variety. The source of data will be KALRO (or other licensed producers) for early generation seed and KEPHIS (or authorized entities) for certified seeds.
- For livestock and aquaculture varieties / parent stock, similarly the first level of aggregation is the type of fish/livestock, and secondly the breed. The production enterprises should be the source of data, unless breeding stock production is also monitored by an authorized government agency.

**Table 24: Aggregation of seed production and distribution indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>M&amp;E responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of seed production units receiving technical assistance/support</td>
<td></td>
</tr>
<tr>
<td>Credit-guarantee scheme</td>
<td>List of participating production units by county</td>
</tr>
<tr>
<td>Technical Assistance for seed retailers and community-based organizations</td>
<td></td>
</tr>
<tr>
<td>Revolving fund for community-based seed production units</td>
<td>Aggregation: simple count ( \sum )</td>
</tr>
<tr>
<td>Climate-smart seed production of seed producers supported by the project</td>
<td></td>
</tr>
<tr>
<td>Early generation seed in tons per variety</td>
<td>KALRO produced list with</td>
</tr>
<tr>
<td></td>
<td>(i) formal name of basic seed variety multiplied through support of the project</td>
</tr>
<tr>
<td></td>
<td>(ii) kg of seed produced by KALRO or their partners per seed variety</td>
</tr>
<tr>
<td></td>
<td>Aggregation: based on KALRO report and National Variety List</td>
</tr>
<tr>
<td>Certified seed in tons per variety</td>
<td>Kenya Plant Health Inspectorate Service (KEPHIS) or authorized entities reports</td>
</tr>
<tr>
<td></td>
<td>quantifying the amount of seeds certified at production units supported by the</td>
</tr>
<tr>
<td></td>
<td>project in a county (i.e., tons per seed variety of sorghum, millet and cassava)</td>
</tr>
<tr>
<td></td>
<td>Aggregation: based on KEPHIS report and National Variety List(^\text{14})</td>
</tr>
</tbody>
</table>

\(^\text{14}\) see KEPHIS webpage [http://www.kephis.org/images/VarietyList/april20170525.pdf](http://www.kephis.org/images/VarietyList/april20170525.pdf) (or more recent)
### Livestock parent stocks (heads)
- camels
- small ruminants
- cattle
- poultry

KALRO prepares consolidated report about Breeding Programs supported by the project; provides quarterly production numbers of parent stocks

**Aggregation:** based on KALRO - Livestock Institutes reports

### Fish fingerlings (tons)
- Nile tilapia
- Catfish

KMFRI/KeFS reports quarterly about fish fingerling production supplying the 24 counties

**Aggregation:** based on KMFRI/KeFS reports for relevant project area

### # of wards where priority CSA seeds (crop varieties, livestock breed, fingerlings) promoted as part of the CIAP are predominantly accessible by farmers, pastoralists and fish farmers.

**Aggregation:** CPCU reports "access" for each priority CSA seed (as defined in reference card) in all project relevant wards with CIAP; supporting survey data is entered into PMIS and final indicator measure will be generated using IF...Then ...Else programming code.

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**5. Infrastructure and equipment procurement and installation**

The construction or rehabilitation of infrastructure and the installation of lab equipment are substantial outputs in results chains 1B and 3A. However, only the latter is included in the PAD results framework. Given the investment volume into infrastructure vis a vis the three matching grants windows, it is pertinent to monitor the actual delivery of the considerable budget absorbing infrastructure investments.

For the purpose of aggregation, first a **common categorization of infrastructure and equipment** will be used to describe a diversity of physical outputs that cut across the financing proposals.

Results Chain 1b "CSA investment implementation performance"

- Number of infrastructure rehabilitated or constructed (by sub-category)
An initial list of sub-categories for describing new or rehabilitated infrastructure outputs of the three windows in a harmonized way by all CPCU is the following:

- # small dams or water reservoirs
- # boreholes
- # Abattoirs,
- # Fodder banks
- # Cattle dips,
- # quarantine stations
- irrigation area (ha),
- Km of rural roads
- Restored rangeland (ha)
- # collection sheds/ aggregation nodes
- # market infrastructure

Results chain 3 A: Increased use of integrated weather and market information ...

- Number of new and refurbished agro-, automated weather stations and hydro-meteorological facilities.

The indicator measures the number of observation facilities (stations, centers) refurbished or newly installed with support of the project, listed by sub-type if necessary.

Secondly, the completion of the full procurement cycle (1. procurement planning, 2. Specification, 3. Tendering/sourcing, 4. Evaluation/Selection, 5. Contract Award, 6. Contract management/ delivery, 7. Final payment) for an infrastructure output will be the determining criteria when evaluating its full achievement, and hence for reporting the count of facilities established or refurbished. This should be verified by field visit by CPCU staff for verification reasons.

6. Grievances redress

Communities and individuals who believe that they are adversely affected by the project may submit complaints to the project's grievance redress mechanisms. This mechanism will comprise a database that registers all complaints and tracks the redress process of each complaint by digital documentation of the "paper trail".

Key for aggregating information on complaints and their status (e.g., received, in process, escalated, closed) is the unique Complaints Registration Number that will be assigned to each complaint received through the different avenues (e.g., office walk-in, phone, letter, email) at each level (i.e. community, ward, county, national). At the ward level, the CDDO member appointed as grievance focal point will register every grievance received using a web-based grievance registration form (with grievance details, citizen contact information, and any supporting documentation that can be uploaded) and locally manage status information online for all cases in the ward's jurisdiction. Thereby grievances can be filtered or searched, for example by using subject matter or spatial filters. The project performance dashboard will comprise an aggregate measure of "% of grievances registered related to delivery of project benefits that have been addressed".
**WORK STREAM 8: REPORTING**

The reporting workstream consists of:

1. Annual work planning and budgeting,
2. Public disclosure
3. Regular reporting (quarterly, semi-annual and annual reporting), and
4. External monitoring (supervision and mid-term review) reports.

1. **Annual work planning and budgeting**

The Annual Work-Plan and Budget (AWPB) describes the planned activities and expenditures of the project for each financial year. A template for AWPB at county and national levels is shown in Annex D.1, along with templates for AWPB implementation monitoring. The AWPB details:

1. **Annual targets** for activities or milestones to be achieved in the current year (and revised target by end of project, where relevant);
2. **Summary of planned expenditures by component and by implementing entity**, with the latter indicated in the responsibility column in the AWPB template; and
3. **Summary of expenditures by category** (project budget by category and planned spending by category in the current year).

This information can be used to track the degree of completion of planned activities in each sub-component or by each implementation agency, the proportion of allocated funds actually spent, and the remaining funds available in each budget category. An integrated AWPB is built on the basis of compiled county and national AWPBs. The AWPB should be linked with the annual procurement plan.

The preparation process of KCSAP AWPB is as follows:

**Step 1:** **Preparation of AWPB guidelines:** The NPCU holds a preparatory meeting **no later than February 15th of each year (N)**, to establish the guidelines and priorities for the AWPB of the next year (N+1), on the basis of:

- project performance indicators as reflected in the results management framework;
- technical and financial progress reports for the first 3 quarters of the current year (N);
- and
- The technical and financial progress reports for the previous year (N-1).

These guidelines are written up by the NPCU M&E Officer and approved by the National Project Coordinator, no later than **30th February of each year (N)**.

**Step 2:** **Parallel planning and budgeting of county and national project activities:**

**County level planning:** Annual work planning and budgeting at the county level will be undertaken in a 3-day consultative forum organized by the CPCU and attended by key stakeholders, including representatives from CTDs, county finance and planning offices. The budgeting process will be based on the guidelines given by the NPCU. The AWPB
will capture all project activities, the cost of service provision from the private and public SPs, county level investments for approved micro-project and sub-project investments, and project coordination and M&E activities. The draft AWPB will be reviewed and approved by the CPSC.

National level planning: The annual work planning and budgeting at the national level will be undertaken in a 3-day consultative forum organized by the NPCU and attended by all implementing agents (e.g. KALRO, KMD, relevant departments of MIA) and representatives from the State Department of Agriculture. The budgeting process will be based on the guidelines developed by the NPCU. The AWPB will capture all project activities under the four project components.

Step 3: AWPB consolidation: NPCU will then convene the project AWPB forum, at which county and national level plans and budgets will be rationalized and consolidated into a draft project AWPB. The resulting draft project AWPB for year N+1 will be produced by 15th April of year N. The draft will be shared with the World Bank for review and with the NTAC.

Step 4: Finalization of AWPB: Comments from the World Bank and NTAC will be incorporated, and a final draft AWPB submitted to the NPSC for approval no later than 30th April of year N.

Step 5: The adopted AWPB shall be transmitted to IDA for no objection no later than 15th of May.

Step 6: The approved AWPB is transmitted to the KCSAP accountant for data input, updating and setting up in the PMIS and financial management system no later than 30th May.

The AWPB serves as the basis for process monitoring, in which the progress and implementation of the different components, sub-components and activities of the project are monitored. The main objective is to allow the KCSAP management at each level to know, for each given activity, whether it has been implemented according to the plan (When? By whom?) and how much it cost.

The PMIS should therefore display the list of planned activities and enable Component leaders to update the progress of activity implementation. The Implementation Matrixes presented in Annexes 8 and 9 of the Project Implementation Manual (PIM) can be used as the basis for listing planned project activities, although this may be updated if there are revisions after mid-term review, and annual planned activities should be clearly identified.15 The PMIS should also establish a link between the level of disbursement (or commitment) and the physical implementation of each activity. It should be possible to link each disbursement to an implemented activity of the project. For this, harmonization in

15 For component 1, the PIM does not present an implementation matrix, but this should be drafted for component 1 for inclusion in the PMIS
activity and budget coding has to take place between the financial management and the M&E unit of the project.

2. Public disclosure
In line with the PIM, to inform stakeholders of KCSAP’s activities and progress, information on the overall progress of the project shall be disclosed on the project website. The project website shall also display geo-referenced information on micro- and sub-projects. At local level, public disclosure also strengthens communities’ abilities to ensure accountability. Information on all civil works (including description of inputs, quantities, unit rate, and supplier/contractor/consultants’ names and their remuneration) shall be made available at community levels through posters and pamphlets in accessible language. CIGs/VMGs and CDDCs implementing micro- and sub-projects shall make publicly available summaries of quarterly reports on project progress in a place where all direct beneficiaries and other affected stakeholders can access the information. This will entail displaying a summarized report on grant beneficiaries, type of value chains and interventions supported at the following locations where applicable: Notice Boards of the CPCU offices, ward, sub-county and county administrative and agricultural offices; and Chief’s office at village level.

3. Quarterly, Semi-Annual and Annual Reports
The PIM indicates that at the national level, the NPCU will submit to the NTAC and NPSC quarterly, semi-annual and annual progress reports. At county level, the CPCU will submit to the CTAC and CPSC quarterly reports for their review and approval, before submission to the NPCU. A generic template for periodic progress reports is provided in Annex D.2.

4. External monitoring (supervision and mid-term review) reports
Reporting from project supervision activities and the mid-term review will follow World Bank guidance. The results of supervision missions are typically written up in the form of an aide memoire drafted before the conclusion of the mission. In general, the main contents of the aide memoire are:

- Implementation status review
- Results achieved
- Status by project component
- Review of compliance with safeguard aspects
- Review of compliance with fiduciary aspects
- Compliance with legal covenants
- Risks
- Pending issues and actions.

The mid-term review report should cover the main topics listed in Section 5.2 above.

To facilitate reporting on results at each stage of project implementation, the PMIS shall incorporate a project performance dashboard that provides easy access to the status of the key results framework indicators (see Section 7.2 on data management).
7. Institutional arrangements for implementing M&E

The previous chapter described how each M&E workstream will be implemented. It is also helpful for stakeholders at each level to have a targeted overview of their roles and responsibilities and to understand how they relate to each other. That is the purpose of this chapter. Roles and responsibilities for M&E are described in Section 7.1. Section 7.2 presents the requirements of the PMIS as a key tool to enable monitoring and reporting. Section 7.3 describes activities to ensure that M&E contributes to learning by project stakeholders, and not just collection and reporting of data.

7.1 Institutional arrangements, roles & responsibilities

Figure 13 gives an overview of roles and responsibilities and data flows in regular monitoring and reporting activities in KCSAP, highlighting M&E arrangements at national level (blue), county level (green) and community level (red).

Figure 13: Roles, responsibilities and data flows in regular monitoring and reporting activities in KCSAP

7.1.1 Roles and responsibilities at national level

At national level, the main M&E activities are the responsibility of the NPCU M&E Officer and Project Component Leaders. An M&E Working Group provides technical advice. NTAC and NPSC review and approve reports. Their respective responsibilities are summarized in Table 25.
Table 25: M&E responsibilities at national level

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPCU M&amp;E Officer</td>
<td>• Overseeing development of the M&amp;E system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Coordination of the project M&amp;E Working Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AWPB preparation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Development &amp; coordination of M&amp;E capacity development plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Preparation of M&amp;E plan, and coordination of M&amp;E activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Convening M&amp;E learning activities and annual M&amp;E performance review</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Leading preparation of quarterly, semi-annual and annual reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Coordinating baseline, mid-term and completion surveys and evaluation activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Facilitating supervision missions</td>
<td></td>
</tr>
<tr>
<td>Component 1 Leader</td>
<td>• Providing support to M&amp;E activities of sub-projects and micro-projects</td>
<td>• Using quarterly reports from sub-project grantees</td>
</tr>
<tr>
<td></td>
<td>• Reporting on county and PPP sub-project progress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reporting on county and PPP sub-project results indicators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Participate in M&amp;E Working Group</td>
<td></td>
</tr>
<tr>
<td>Component 2 Leader</td>
<td>• Providing support to M&amp;E activities of grantees and contractors</td>
<td>• Using quarterly reports from research project grantees and other contractors</td>
</tr>
<tr>
<td></td>
<td>• Reporting on progress of Component 2 activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reporting on results indicators of Component 2 activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Participate in M&amp;E Working Group</td>
<td></td>
</tr>
<tr>
<td>Component 3 Leader</td>
<td>• Providing support to M&amp;E activities of grantees and contractors</td>
<td>• Using quarterly reports from project grantees and other contractors</td>
</tr>
<tr>
<td></td>
<td>• Reporting on progress of Component 3 activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reporting on results indicators of Component 3 activities</td>
<td></td>
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<tr>
<td></td>
<td>• Participate in M&amp;E Working Group</td>
<td></td>
</tr>
<tr>
<td>M&amp;E Working</td>
<td>See ToRs in Annex F</td>
<td></td>
</tr>
</tbody>
</table>
### 7.1.2 Roles and responsibilities at county level

At county level, the main responsibility for M&E is with the CPCU. Other roles are played by CTAC and CPSC (Table 26). The roles of CTDs are discussed in section 7.1.3.

#### Table 26: M&E responsibilities at county level

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPCU M&amp;E Officer</td>
<td>• AWPB preparation &lt;br&gt; • Preparation of M&amp;E plan, and coordination of M&amp;E activities &lt;br&gt; • Monitoring progress in CDD activities &lt;br&gt; • Monitoring functioning of CDD institutions (CIGs, CDDCs, CVCDCs) &lt;br&gt; • Coordinating beneficiary verification surveys &lt;br&gt; • Undertaking CSA seed input stockist survey &lt;br&gt; • Entering data received into PMIS &lt;br&gt; • Entering grievances received into GRM &lt;br&gt; • Leading preparation of quarterly reports</td>
<td>• Using AWPB templates &lt;br&gt; • Using CDDC and CVCDC tracker templates &lt;br&gt; • Using quarterly report template</td>
</tr>
<tr>
<td>CTAC</td>
<td>• Review county AWBPs &lt;br&gt; • Review project progress</td>
<td>• Using AWPBs received from CPCU &lt;br&gt; • Using quarterly reports received from CPCU &lt;br&gt; • By taking part in</td>
</tr>
<tr>
<td>NTAC</td>
<td>• Review of AWPBs &lt;br&gt; • Review of quarterly, semi-annual and annual reports &lt;br&gt; • Reporting meeting minutes to NPCU</td>
<td>• Using AWPBs submitted by NPCU &lt;br&gt; • Using reports submitted by NPCU</td>
</tr>
<tr>
<td>NPSC</td>
<td>• Approval of AWPBs &lt;br&gt; • Review and approval of quarterly, semi-annual and annual reports</td>
<td>• Using AWPBs submitted by NPCU &lt;br&gt; • Using reports submitted by NPCU</td>
</tr>
<tr>
<td>Implementation partners</td>
<td>• Quarterly reporting using mandated reporting templates</td>
<td>•</td>
</tr>
</tbody>
</table>
7.1.3 Roles and responsibilities of SPs and CTDs

Actual conduct of data collection for many indicators is the responsibility of contracted service providers (SPs). Where no SP is contracted, CTDs will take on this role. Where county government is contracted to implement a sub-project, specific monitoring tasks may be allocated by the lead agency to relevant CTDs.

Table 27: M&E responsibilities of SPs and CTDs

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th>Notes</th>
</tr>
</thead>
</table>
| SPs or CTDs as facilitators of CDD and micro-projects | • Registration of project beneficiaries  
• Monitoring of CIG/VMG development  
• Monitoring of changes at CIG/VMG member household level  
• Facilitating CIG/VMG members to monitor micro-project implementation  
• Documenting TIMP training activities  
• Reporting progress and monitoring data to CPCU | • Using producer organisation development tracker  
• Using CSC template |
| CTDs as implementers of county sub-projects | • Registration of project beneficiaries  
• Monitoring project progress and results  
• Documenting TIMP training activities  
• Reporting progress and monitoring data to CPCU  
• Disclosure of sub-project monitoring information | • Using AWPB templates  
• Using Common Performance Measurement Framework |
7.1.4 Roles and responsibilities at community level

At community level, CIGs/VMGs, CDDCs/CDDOs and CVCDCs have responsibilities for M&E as indicated in Table 28.

Table 28: M&E responsibilities of community organisations

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIGs/VMGs</td>
<td>• Monitoring micro-project implementation</td>
<td>• Using CSC template</td>
</tr>
<tr>
<td></td>
<td>• Monitoring CIG/VMG development</td>
<td>• Using PO development tracker</td>
</tr>
<tr>
<td></td>
<td>• Monitoring satisfaction with service providers</td>
<td>• By responding to beneficiary verification survey</td>
</tr>
<tr>
<td></td>
<td>• Disclosure of micro-project monitoring information</td>
<td>• Using complaint documentation forms</td>
</tr>
<tr>
<td></td>
<td>• Receiving and reporting grievances</td>
<td></td>
</tr>
<tr>
<td>CDDCs / CDDOs</td>
<td>• Monitoring micro- and sub-project implementation</td>
<td>• Using CSC template</td>
</tr>
<tr>
<td></td>
<td>• Disclosure of micro- and sub-project monitoring information</td>
<td>• Using complaint documentation forms</td>
</tr>
<tr>
<td></td>
<td>• Receiving and reporting grievances</td>
<td></td>
</tr>
<tr>
<td>CVCDCs</td>
<td>• Monitoring service provision by contracted service providers or CTDs</td>
<td></td>
</tr>
</tbody>
</table>

7.2 Data management

The PMIS plays a central role in management of M&E data (see Figure 13). The functions of the PMIS in terms of M&E are to provide information to:

- measure progress against plan
- measure achievement of intended results, i.e., outputs, immediate and intermediate outcomes
- track budgets and disbursements
- enable sharing of information among management and staff
- enable reporting to stakeholders
- archive M&E data, including supporting evidence material.
By collating data from different workstreams and aggregating data across different project units (e.g. counties, sub-projects), the PMIS enables the NPCU to have easy access to all relevant information about project implementation and results. Design of the PMIS shall make particular consideration of the following:

- the need to monitor process (i.e. progress of activities against implementation plans and AWPBs)
- the need to monitor geo-referenced results and compare results with baseline values
- the need to aggregate data from different sources for reporting on overall results (see Workstream 7), while also providing access to sub-categories of data (e.g. disaggregation of results by county, ward etc.);
- the need to avoid double counting of results from similar units (e.g. households, CIGs) or similar regions (e.g. CIG member beneficiaries of sub-projects);
- the need to highlight key indicators of project performance from among the large number of project indicators
- the need to track timely submission of reports.

For the latter, a national project performance dashboard shall be developed, that presents primarily the status of the PAD results framework indicators and other indicators that the project M&E Working Group deem of critical value to informing ongoing management decisions (see Annex F).

Given the limited internet connectivity in many counties, templates for data entry should ideally be usable off-line, so that data can be uploaded after entry. Work flows for data entry and data uploading should, where necessary, include automated checks for data completeness and plausibility, and enable NPCU staff to review data submitted before formal entry into the shared components of the PMIS (see Workstream 6 on data quality management).

### 7.3 Integrating learning into the project implementation process

One of the key principles of this manual is that M&E must not be viewed as an “add on” exercise that is largely conducted once the intervention is completed, but that it becomes a mechanism integral to project implementation, and helps to surface issues, obtain feedback, and track developments in a timely manner.17 Patton (2010) describes this continuous learning or development loops as “developmental evaluation”. It involves real-time feedback about what is emerging in complex dynamic systems as innovators seek to bring about systems change. It supports timely changes to interventions, adapting to changed circumstances, and altering tactics based on emerging conditions.

Developmental evaluation relies heavily on participatory evaluation techniques, supporting evidence-based and experiential learning and documentation (e.g. Participatory Action Research, tracking the change process, reflexive monitoring and evaluation, self-evaluation, and timely response to issues arising). Practicing reflection and learning throughout the implementation process, entails bringing stakeholders MI together, designing and leading processes of critical reflection and following double

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loop and triple loop learning process leading to action and change. This requires respect for different opinions and an atmosphere of trust for those opinions to be voiced. It also requires a systematic tracking of processes and progress to enable reflection to take place. Interventions need to be sufficiently flexible and adaptable to changing conditions and analysis undertaken in an iterative fashion so as to promote experimentation and risk taking.

Learning should not only be directed at the accumulation of facts and data, but also around changes in attitudes and revisiting of assumptions. Table 29 provides general suggestions on how to build stakeholders’ capacities to reflect and learn, and some suggestions about how KCSAP can develop opportunities for strengthening the capacity for reflection and learning within the project. Many of these activities should be integrated into project implementation processes (e.g., group discussions with community members guided by the Community Scorecard), while others will require coordination of activities between the NPCU M&E officer and communications officer (e.g., quarterly ward citizen engagement events, convening annual review workshops, sharing lessons through radio and other means).

Table 29 Opportunities for reflection and learning in KCSAP

<table>
<thead>
<tr>
<th>Individual</th>
<th>Organizational</th>
<th>Enabling environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies in experiential learning and documentation e.g. Participatory Action Research, tracking the change process, reflexive monitoring and evaluation</td>
<td>• Create a ‘learning culture’ • Dedicate time for reflection on experience and documentation of lessons learned. • Dedicate opportunities for staff to reflect on and document organizational change • Put in place appropriate (participatory) monitoring and evaluation systems • Ensure transparency, responsiveness, flexibility of the decision-making processes • Improve knowledge flows across the organization or system actors.</td>
<td>• Processes of joint learning involving evidence from the field to inform policy; • Documentation and sharing of learning on interventions; • Transparency of decision-making processes</td>
</tr>
</tbody>
</table>

Include developmental evaluation techniques in M&E capacity development plan

Engage NPCU and CPCU staff in making space for reflection and learning, e.g., self-assessment and review as part of the AWPB preparation; periodic review of experiences; systematic documentation of lessons learnt • developing leadership skills • encouraging team members to propose/try out new things, take risks, and rewarding innovative practice; • regular field visits and focus group discussions with systematic documentation

• convene citizen engagement events and promote two-way communication channels; • budget for facilitated knowledge exchange, e.g., between CIGs, CDDCs, SPs etc within and across counties • NCPU to support staff exchange between CPCUs

8. Capacity building needs
A questionnaire survey of M&E capacity building needs was applied to all CPCUs (Annex H). This section presents the main findings of the CPCU capacity needs assessment, as well as key working assumptions and suggestions for capacity building of SPs/CTDs, sub-project grantees, community stakeholders and the NPCU.

8.1 CPCU M&E capacity needs
CPCUs play key roles in M&E, data management and reporting. A survey was conducted of 24 CPCUs, of which 23 CPCUs responded. The main findings are:

**Experience and training of M&E Officers:**
- Only 6 out of 23 M&E officers have previously worked in a donor project as M&E officer, but more than half have previously been involved in donor project M&E activities.
- 40% of M&E officers have never had training in M&E. Many of those that have report having received only short-term training. There is strong demand for training on a range of M&E-related topics.
- M&E Officers have on average less experience and lower skills in M&E than project coordinators and research-extension liaison officers.

⇒ CPCUs should develop M&E work plans that involve M&E officers together with other CPCU technical staff in conducting M&E activities. Allocation of roles should take advantage of other CPCU staff strengths, while also ensuring that each staff member is able to focus on the responsibilities within their respective docket.

⇒ Develop a programme of training for M&E officers and other CPCU staff.

**M&E Training:**
- Large proportions of M&E officers expect difficulty or have limited confidence about a range of M&E tasks, including household surveys, monitoring service provision, data quality checking and managing M&E databases.
- M&E officers think that training in almost any M&E related topic would be valuable.
- M&E training should also be for other CPCU staff.

⇒ Identify the various tasks and skills that CPCU staff need to have to implement M&E activities, and develop a structured training course consisting of different modules that can be delivered over time.

**Physical infrastructure for M&E:**
- The majority of CPCUs have access to computers with reliable internet access and vehicles for field monitoring visits.
Inventory CPCU computing infrastructure, connectivity and vehicle procurement needs, and ensure that CPCUs are well equipped.

Internet connectivity is likely to be a continuing issue in many CPCUs, so procedures for data management should not depend fully on internet access. E.g. when digital tablet survey tools are used and CPCUs enter data into the PMIS, ensure that data pre-processing and entry can be done off-line, so that only uploading requires internet access; or provide off-line templates for data entry that can be emailed to NPCU for uploading.

**Systemic capacities for M&E:**

- Scoring of CPCU capacities shows that, on average, CPCUs with stronger M&E officers also have other CPCU staff with more experience and better infrastructure. This means that weaker CPCUs are weaker in several dimensions. In addition to lacking specific skills, less experience of M&E among all CPCU staff likely implies that the overall management of M&E activities will be weaker.
- All regions of the country have at least 1 CPCU with strong M&E capacities.

Develop a systematic procedure for internal assessment of M&E performance that informs an ongoing programme of capacity support.

NPCU should target monitoring and ongoing support to weaker CPCUs.

Make use of CPCUs with stronger M&E experience to share experience and/or provide coaching to nearby CPCUs with weaker experience, e.g. by peer review and coaching on M&E management and planning procedures.

Document and share good experiences and lessons learned with M&E.

**Table 30: Ranking of CPCUs by M&E capacity score**

<table>
<thead>
<tr>
<th>County</th>
<th>Rank</th>
<th>M&amp;E officer experience</th>
<th>CPCU staff M&amp;E task experience</th>
<th>Infrastructure for M&amp;E</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top tertile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garissa</td>
<td>1</td>
<td>4</td>
<td>4.6</td>
<td>0.75</td>
<td>9.35</td>
</tr>
<tr>
<td>Tana River</td>
<td>2</td>
<td>2</td>
<td>4.8</td>
<td>2.25</td>
<td>9.05</td>
</tr>
<tr>
<td>West Pokot</td>
<td>3</td>
<td>3</td>
<td>4.7</td>
<td>1</td>
<td>8.7</td>
</tr>
<tr>
<td>Siaya</td>
<td>4</td>
<td>3</td>
<td>4.5</td>
<td>1</td>
<td>8.5</td>
</tr>
<tr>
<td>Marsabit</td>
<td>5</td>
<td>3</td>
<td>4.2</td>
<td>1</td>
<td>8.2</td>
</tr>
<tr>
<td>Laikipia</td>
<td>6</td>
<td>2</td>
<td>4.1</td>
<td>1.75</td>
<td>7.85</td>
</tr>
<tr>
<td>Kisumu</td>
<td>7</td>
<td>2</td>
<td>4.7</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Kakamega</td>
<td>8</td>
<td>3</td>
<td>4.6</td>
<td>0</td>
<td>7.6</td>
</tr>
<tr>
<td>Middle tertile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamu</td>
<td>9</td>
<td>1</td>
<td>3.7</td>
<td>2.75</td>
<td>7.45</td>
</tr>
</tbody>
</table>
8.2 Capacity needs of SPs and CTDs

Contracted service providers’ and CTDs’ primary tasks in M&E are:

- implementation of the producer organization development tracker at CIG/VMG and member household levels, and
- Facilitating CIGs/VMGs and communities to monitor completion of micro- and sub-grants using the Community Scorecard (CSC) tool

During preparation of this M&E manual it was not possible to assess the capacities of SPs (who have not yet been contracted) or specific CTDs (whose specific roles have yet to be defined). However, the CPCU survey did collect some data on whether core CTDs related to the project (departments of agriculture, livestock and fisheries, irrigation, finance and economic planning, environment and natural resources and cooperative development) have an M&E unit, have full-time M&E staff, and regularly collect data.

Overall, the majority of CTDs closely related to the project do not have an M&E unit staffed with a full-time M&E officer, and while most sometimes collect some data, few do so regularly (Table 30). It is therefore likely that CTD staff capacities for M&E are also weak.
8.2 Capacity needs of SPs and CTDs

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• implementation of the producer organization development tracker at CIG/VMG and member household levels, and
• facilitating CIGs/VMGs and communities to monitor completion of micro- and sub-grants using the Community Scorecard (CSC) tool.

During preparation of this M&E manual it was not possible to assess the capacities of SPs (who have not yet been contracted) or specific CTDs (whose specific roles have yet to be defined). However, the CPCU survey did collect some data on whether core CTDs related to the project (departments of agriculture, livestock and fisheries, irrigation, finance and economic planning, environment and natural resources and cooperative development) have an M&E unit, have full-time M&E staff, and regularly collect data.

Overall, the majority of CTDs closely related to the project do not have an M&E unit staffed with a full-time M&E officer, and while most sometimes collect some data, few do so regularly (Table 30). It is therefore likely that CTD staff capacities for M&E are also weak.

### Table 31: Summary of capacities of 22 counties’ CTDs for M&E

<table>
<thead>
<tr>
<th></th>
<th>% with M&amp;E unit</th>
<th>% with full time staff</th>
<th>Frequency of data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Regularly</td>
</tr>
<tr>
<td>Agriculture</td>
<td>59%</td>
<td>45%</td>
<td>3</td>
</tr>
<tr>
<td>Irrigation</td>
<td>14%</td>
<td>4.5%</td>
<td>1</td>
</tr>
<tr>
<td>Finance</td>
<td>59%</td>
<td>32%</td>
<td>9</td>
</tr>
<tr>
<td>Environment</td>
<td>23%</td>
<td>32%</td>
<td>3</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>14%</td>
<td>4.5%</td>
<td>1</td>
</tr>
</tbody>
</table>

For SPs, the roles of SPs in M&E should be made clear during the contracting process, and budgets made available to ensure that these roles are fulfilled. Similarly, where no SPs are contracted, CTDs should be informed of their roles in M&E. A standardized training module on the producer organisation development tracker and CSC should be developed and provided to all SPs and CTDs.

### 8.3 Capacity needs of sub-project grantees

All county and PPP sub-grantees should comply with the requirements of the Common Performance Measurement Framework (CPMF). All sub-grant contracts should include the CPMF requirements. Capacities and prior experience in M&E will vary among grantees, and all grantees will need to know the specific requirements for sub-grant M&E in the project. A standardized training module should be developed on implementation of the CPMF. The training may best be delivered as part of a workshop with sub-grantees, during which they are facilitated to develop M&E plans that meet the CPMF requirements.

### 8.4 Capacity needs of community stakeholders

The community stakeholders with M&E tasks are primarily CIGs/VMGs and CDDCs. CIGs/VMGs will work with SPs or CTDs to monitor using the Producer Group Tracker. CIGs/VMGs and CDDCs will also monitor progress in their micro- and sub-grants using the CSC. Standardized training modules should be developed to be delivered by the SPs and CTDs on these M&E tasks. For implementation of the Producer Group Tracker, some flexibility may be useful, such that in some cases SPs may implement the tracking tool, while in other cases CIGs with higher capacity may either implement it themselves or employ a local person with sufficient skills to implement it on their behalf.
Depending how the Grievance Redress Mechanism is designed, other stakeholders at community, ward or sub-county level may also have roles in documentation and reporting of grievances. All stakeholders involved in implementing the GRM should be trained, including on how to record and report grievances, actions taken and results of those actions.

8.5 Capacity needs at national level

The critical capacities for M&E at national level are those for:

- Coordination and harmonization of M&E across components and project implementation levels
- Production of procedural and technical guidance on conduct of M&E
- Efficient handling and management of M&E data, and
- Promotion of continual learning among project implementers and stakeholders.

Establishment of the project M&E Working Group, with representation from project components, implementation partners and CPCUs will greatly facilitate coordination and harmonization of M&E procedures and activities. It will play a key role in ensuring that data collection and reporting templates and data management systems (including digital survey tools and PMIS) meet project needs. This Working Group should be established as soon as possible and remain operational throughout the project lifetime.

Procedural guidance on the conduct of all aspects of M&E will ensure that all actors in the M&E system receive sufficient and clear guidance to support their M&E activities. Producing some aspects of this guidance may require technical support from external experts (e.g. on sampling approaches), and consultants should be brought in to assist as needed.

Digital systems for data collection, data quality checking, data transmission and reporting can greatly facilitate the efficient handling and use of data. Establishment of the PMIS will be critical to achieve this. Digitization of data collection templates and data transmission (e.g. using surveyCTO) will also increase the efficiency of data collection within project counties, and the transmission of data from counties to national level. However, limited connectivity in rural areas should be considered, e.g. by enabling off-line data entry before transmission.

M&E in KCSAP involves multiple stakeholders, many of whom have a range of capacity development needs. While ensuring compliance with KCSAP M&E procedures, the national M&E officer and M&E Working Group should also pay attention to learning by doing, and sharing and dissemination of M&E experiences for continual improvement of M&E capacities and processes. Annual M&E performance assessment, conducted as a self-assessment rather than a compliance exercise, and M&E experience exchange workshops involving not just CPCUs but also other actors (e.g. service providers, CTDs), can be used to promote a culture of continual learning and improvement.
9. Work plan for development of the KCSAP M&E system

In order to assist the NPCU in getting the KCSAP M&E system up and running, this section presents a workplan over an initial period of 6 months that highlights the critical tasks that need to be implemented. The main areas of work are:

1. Establishing the project M&E Working Group
2. Developing the PMIS
3. Developing tools and systems for data collection
4. M&E implementation planning
5. Developing an M&E capacity building plan
6. Initiation of baseline surveys.

Table 32: Workplan for development of the M&E system

<table>
<thead>
<tr>
<th></th>
<th>Responsible</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establish M&amp;E Working Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Agree membership of WG</td>
<td>M&amp;E Officer with NPC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Convene initial meeting, confirm ToRs and make short-term action plan</td>
<td>M&amp;E WG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Decide beneficiary identification coding method</td>
<td>M&amp;E WG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Review and agree PMIS functionalities and requirements</td>
<td>M&amp;E WG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Review and agree data collection templates</td>
<td>M&amp;E WG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td>Review and agree all reporting timing requirements</td>
<td>M&amp;E WG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.7</td>
<td>Ensure alignment of grievance redress documentation system with M&amp;E reporting on grievances</td>
<td>M&amp;E WG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Discuss and agree capacity building plan</td>
<td>M&amp;E WG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Develop PMIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Review and agree PMIS functionalities and requirements</td>
<td>M&amp;E WG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Draft ToRs for PMIS service provider</td>
<td>M&amp;E Officer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>Contract PMIS service provider</td>
<td>NPCU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Build PMIS v0.1</td>
<td>contracted consultant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>Trial PMIS v0.1</td>
<td>NPCU with contracted consultant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>2.6</td>
<td>Draft PMIS user guide v0.1</td>
<td>NPCU with contracted consultant</td>
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<td>3</td>
<td>Develop tools and systems for data collection</td>
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</tr>
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<td>3.1</td>
<td>Review digital data management service providers</td>
<td>M&amp;E Officer</td>
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<tr>
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<td>3.2</td>
<td>Review and agree digital data management platform functionalities required</td>
<td>M&amp;E WG</td>
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<td>3.3</td>
<td>Pre-contract discussions with digital data management service provider to further clarify system functions and interoperability with PMIS</td>
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<td>Trial digital data collection procedures</td>
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<td>3.6</td>
<td>Procure digital tablets and other required tools</td>
<td>NPCU</td>
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<td>3.7</td>
<td>Draft digital survey tool user guide</td>
<td>NPCU with contracted consultant</td>
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<td>3.8</td>
<td>Review and agree data collection and reporting templates</td>
<td>M&amp;E WG</td>
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<td>3.9</td>
<td>Ensure M&amp;E reporting requirements are included in implementation partner and sub-project grantee contracting templates</td>
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<td>3.10</td>
<td>Identify capacity needs for implementing digital and other data collection and reporting activities</td>
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### 4 M&E implementation planning

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<td>4.1</td>
<td>Draft guidelines for national and CPCU M&amp;E planning</td>
<td>M&amp;E Officer with M&amp;E WG</td>
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<td>4.2</td>
<td>Training for CPCUs on M&amp;E planning</td>
<td>M&amp;E officer</td>
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<tr>
<td>4.3</td>
<td>Draft M&amp;E implementation plans</td>
<td>NPCU and CPCUs</td>
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<tr>
<td>4.4</td>
<td>Ensure that computer, internet connection and vehicle procurement to support M&amp;E is included in CPCU procurement plans</td>
<td>M&amp;E officer</td>
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### 5 Develop M&E capacity building plan

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<td>5.1</td>
<td>Review M&amp;E tasks at different levels to identify skills required</td>
<td>M&amp;E Officer</td>
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<tr>
<td>5.2</td>
<td>Undertake capacity needs assessment of Service Providers and CTDs</td>
<td>contracted consultant</td>
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<tr>
<td>5.3</td>
<td>Review capacity needs at national, county and community levels</td>
<td>M&amp;E WG</td>
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<tr>
<td>5.4</td>
<td>Draft capacity building plan</td>
<td>M&amp;E Officer, with M&amp;E WG</td>
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<tr>
<td>5.5</td>
<td>Draft M&amp;E implementation guides</td>
<td>M&amp;E Officer, with M&amp;E WG</td>
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<tr>
<td>5.6</td>
<td>Implement M&amp;E capacity building plan</td>
<td>M&amp;E Officer</td>
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<td>5.7</td>
<td>Procure services for capacity building as required</td>
<td>NPCU</td>
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### 6 Baseline surveys

<table>
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<tr>
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<tr>
<td>6.1</td>
<td>Implement general baseline survey</td>
<td>contracted</td>
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<tr>
<td></td>
<td></td>
<td>consultant</td>
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<td>6.2</td>
<td>Decide beneficiary identification coding method</td>
<td>M&amp;E WG</td>
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<td>6.3</td>
<td>Prepare data collection templates for beneficiary baseline</td>
<td>M&amp;E Officer</td>
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<td>6.4</td>
<td>Train CPCUs, SPs, CTDs in beneficiary baseline data collection methods</td>
<td>M&amp;E Officer, with consultant support if needed</td>
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Annexes

**Annex A: PAD Results Framework Indicators**

**PDO statement**

To increase agricultural productivity and build resilience to climate change risks in the targeted smallholder farming and pastoral communities in Kenya, and in the event of an Eligible Crisis or Emergency, to provide immediate and effective response.

**Project Development Objective Indicators**

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<tr>
<th>Indicator name</th>
<th>Baseline</th>
<th>YR1</th>
<th>YR2</th>
<th>YR3</th>
<th>YR4</th>
<th>YR5</th>
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<tr>
<td>Direct project beneficiaries (number)</td>
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<td>88,450</td>
<td>278,900</td>
<td>478,500</td>
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<td>49005</td>
<td>98010</td>
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<td>VMGs (number, sub-type breakdown)</td>
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<td>50,000</td>
<td>90,000</td>
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<td>30</td>
<td>30</td>
<td>40</td>
<td>45</td>
<td>45</td>
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<tr>
<td>Increase in productivity of selected agricultural commodities supported by the project (%) Sorghum (kg/ha)</td>
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<td>1000</td>
<td>0</td>
<td>1002</td>
<td>1005</td>
<td>1150</td>
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<td>Millet (kg/ha)</td>
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<td>901.8</td>
<td>904.5</td>
<td>1035</td>
<td>1080</td>
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<td>Cassava (kg/ha)</td>
<td>5000</td>
<td>0</td>
<td>5010</td>
<td>5025</td>
<td>5750</td>
<td>6000</td>
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<td>Dairy (L milk per lactation)</td>
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<td>1503</td>
<td>1507</td>
<td>1725</td>
<td>1800</td>
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<td>Aquaculture (t/ha)</td>
<td>1200</td>
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<td>1202.4</td>
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<td>1380</td>
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<td>Targeted beneficiaries (in CIGs/VMGs) who have adopted at least one TIMP promoted by the project (Number)</td>
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<td>0</td>
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<td>32670</td>
<td>72600</td>
<td>108900</td>
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<td>5445</td>
<td>32670</td>
<td>72600</td>
<td>108900</td>
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<td>Client-days of training provided on TIMPs (Number)</td>
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<td>272250</td>
<td>544500</td>
<td>907500</td>
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<td>40</td>
<td>45</td>
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<td>Beneficiaries satisfied with relevance, timeliness and effectiveness of TIMP advisory services received (disaggregated by gender) (Percentage)</td>
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<td>40</td>
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<td>Grants approved for CIGs, VMGs, PPPs and counties (Number)</td>
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<td>3693</td>
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<td>CIGs (Number - Sub-Type: Supplemental)</td>
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<td>Indicator Name</td>
<td>YR1</td>
<td>YR2</td>
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<td>Number of CVIs supported by the project (%)</td>
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<td>200</td>
<td>200</td>
<td>200</td>
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<td>Share of which female (%)</td>
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<td>Number of communities supported by the project (%)</td>
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<td>Share of which female (%)</td>
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<td>100</td>
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<td>Number of CIGs/VMGs supported by the project (%)</td>
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<td>Number of PPPs supported by the project (%)</td>
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<td>100</td>
<td>100</td>
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<tr>
<td>Share of which female (%)</td>
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<td>100</td>
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<td>Total land area (Hectare)</td>
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<td>2004</td>
<td>3006</td>
<td>4008</td>
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<td>Share of which female (%)</td>
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<td>Head of livestock (Number)</td>
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<td>16000</td>
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<td>Share of which female (%)</td>
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<td>Reduced net GHG emissions per unit (kilogram) of product produced for selected agricultural commodities: (Percentage)</td>
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<td>Sorghum (kgCO2e/kg)</td>
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<td>Millet (kgCO2e/kg)</td>
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<tr>
<td>Cassava (kgCO2e/kg)</td>
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<td>.18</td>
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<td>Dairy (kgCO2e/kg)</td>
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<td>TIMPs tested through on-farm trials (number)</td>
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<td>Share of which validated (%)</td>
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<td>Farmers participating in on-farm TIMP trials (Number)</td>
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<td>Share of which female (Percentage)</td>
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<td>Technical assistance for seed retailers and community -based organizations (CBOs) (Number - Sub-Type: Breakdown)</td>
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<td>Revolving fund for community based seed production units (Number - Sub-Type: Breakdown)</td>
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<td>Increased production of climate-smart agriculture inputs by seed and breed stock producers supported by the project (Metric-ton)</td>
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<td>72</td>
<td>72</td>
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<td>Early generation seed (Metric ton - SubType: Supplemental)</td>
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<td>Certified seed (Metric ton - SubType: Supplemental)</td>
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<td>MScs (Number - Sub-Type: Breakdown)</td>
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<td>Short-term training (Number - Sub-Type: Breakdown)</td>
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<td>145</td>
<td>295</td>
<td>440</td>
<td>575</td>
<td>580</td>
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<td>30</td>
<td>30</td>
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<td>30</td>
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<tr>
<td>New and refurbished agro- automated weather stations and hydro meteorological facilities (Number)</td>
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<td>48</td>
<td>150</td>
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<td>198</td>
<td>198</td>
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<tr>
<td>Users receiving integrated agroweather information and market information services (Number)</td>
<td>0</td>
<td>720,000</td>
<td>1,200,000</td>
<td>2,400,000</td>
<td>3,600,000</td>
<td>4,800,000</td>
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<td>Share of which female (Percentage - Sub-Type: Supplemental)</td>
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<td>35</td>
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<td>50</td>
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<tr>
<td>Satisfactory quarterly project interim financial and monitoring reports submitted within 45 days of end of the previous period (%)</td>
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<td>50</td>
<td>60</td>
<td>75</td>
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<td>Grievances registered related to delivery of project benefits addressed (Percentage)</td>
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<td>30</td>
<td>50</td>
<td>60</td>
<td>80</td>
<td>100</td>
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### Annex B: Baseline indicators

#### Annex B.1 General and RIMA baseline survey indicator list

N.B. The list in this annex for the general baseline survey is based on the requirements of the FAO RIMA-II methodology. Additional indicators (indicate in bold) have been added for access to credit, adoption of TIMPs and agricultural product marketing and sales. Conversion of the list into a field survey tool may be aided by consulting the FAO Kenya Office RIMA-II survey tool.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
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<tbody>
<tr>
<td>Household members</td>
<td>Household roster including age, gender, education level, main and secondary employment for each member</td>
</tr>
<tr>
<td>Improved sanitation</td>
<td>Variable indicating access to improved toilet facility (covered pit latrine private, private ventilated improved pit latrine, and private flush toilet).</td>
</tr>
<tr>
<td>Improved water</td>
<td>Variable indicating access to an improved water source (piped dwelling, piped public tap, protected shallow well, borehole, protected spring, roof rain water).</td>
</tr>
<tr>
<td>Sources of energy</td>
<td>Variable indicating use of different energy sources</td>
</tr>
<tr>
<td>Closeness to primary school</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td>Closeness to hospital (public/private)</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td>Closeness to health facility (public/private)</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td>Closeness to livestock market</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td>Closeness to agricultural market</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td>Closeness to petty trading market</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td>Closeness to county administrative unit</td>
<td>The distance from household to the nearest facility. Record both KM and Minutes</td>
</tr>
<tr>
<td>Access to financial services</td>
<td>Use of different financial institutions for savings and credit (e.g. self-saving, chamas, mobile services, ASCAs, ROSCAs, SACCOs, MFIs, banks, government funds)</td>
</tr>
<tr>
<td>Wealth index</td>
<td>A wealth index. A list of variables assumes a value of 1 or 0 is used, depending on whether or not a household has specific non-productive assets, such as a radio, lamp, mobile, bicycle, table, chairs, bed, hand mill, mattress, solar panel, water tank or jerry cans.</td>
</tr>
<tr>
<td>Agricultural asset index</td>
<td>Agricultural asset index. A list of variables assumes a value of 1 or 0 is used, depending on whether or not a household has specific productive assets, such as an axe, plough, hoe, sickle, rake, cart, ox plough and other assets.</td>
</tr>
<tr>
<td>TLU per capita</td>
<td>TLU standardizes different types of livestock into a single unit of measurement</td>
</tr>
<tr>
<td>Land per capita</td>
<td>Total area (acres) employed for crop production.</td>
</tr>
<tr>
<td>Participation in associations</td>
<td>e.g. women’s groups, farmer self-help groups, youth groups, VMGs, savings and credit groups etc</td>
</tr>
<tr>
<td>Credit (value) per capita</td>
<td>Total amount (USD) of loans received in the last month and their sources.</td>
</tr>
<tr>
<td>Past credit (value) per capita</td>
<td>Total amount (USD) of loans contracted before the last month and their sources.</td>
</tr>
<tr>
<td>Formal transfers (value) per capita</td>
<td>Total amount (USD) of formal transfers received in the last month. They include cash for work programs, relief food carried out by non-governmental organizations (NGOs), productive inputs, benefits from elderly people schemes and social action for elderly programs.</td>
</tr>
<tr>
<td>Informal transfers (value) per capita</td>
<td>Total amount (USD) of informal transfers received in the last month. They include help in cash and in kind from family members and in-laws, remittances, gifts and borrowing from friends and relatives.</td>
</tr>
<tr>
<td>Indicator</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Average years of education</td>
<td>Average years of education of household members.</td>
</tr>
<tr>
<td>Share of active members</td>
<td>The dependency ratio is the share of household members actively employed (&gt;15 and &lt;64 years old) over the household size.</td>
</tr>
<tr>
<td>CSI</td>
<td>The CSI is a weighted sum of the number of days the household adopted different strategies to cope with food shortage in the past week. The strategies are weighted as a figure of 1-4 (according to focus group discussions implemented)</td>
</tr>
<tr>
<td>Income-generating activities</td>
<td>Income from different sources (farming activity; wage employment; sale of livestock products; non-farm enterprise; a household has received transfers; rent, the sale of assets or other income sources). RIMA-II then creates a variable based on the sum of the different sources of income for the household. A list of variables assumes a value of 1 or 0 is used, depending on whether or not a household has been involved in farming activity; wage employment; sale of livestock products; non-farm enterprise; a household has received transfers; rent, the sale of assets or other income sources.</td>
</tr>
<tr>
<td>Crop and livestock diversity and yields</td>
<td>Types of crop and livestock raised; scale of production for each agricultural activity (hectares, head of livestock, hives etc); yield (harvest / unit area, livestock yields); marketed crop and livestock produce (% harvest marketed). RIMA-II then creates a variable based on the sum of the different crops cultivated by the household during the last season.</td>
</tr>
<tr>
<td>Adoption of TIMPs and input use</td>
<td>Adoption of TIMPs (see list in PAD) in crop and livestock production and use of common farming inputs (e.g. improved seeds, fertilizer, organic manure, herbicides, livestock vaccinations, AI etc); adoption of project-promoted TIMPs. Data collected should include use (yes/no) and measures of the intensity of use (e.g. fertilizer used per acre).</td>
</tr>
<tr>
<td>Participation in training</td>
<td>Dummy variable for participating in trainings (on agricultural techniques, livestock and products, business skills, and other).</td>
</tr>
<tr>
<td>Access to agricultural advisory services</td>
<td>Access to advisory services (e.g. agricultural extension, household enterprise development)</td>
</tr>
<tr>
<td>Access to and use of agrometeorological and market information services</td>
<td>Whether the household knows about, receives and uses agro-met and market information services, and their channels of access (e.g. mobile service, radio, extension agents, NGOs etc)</td>
</tr>
<tr>
<td>Food consumption per capita</td>
<td>Monetary value (USD) of per capita food consumption, including bought, auto-produced, received for free (as gifts or part of a conditional project) and stored food of the last month.</td>
</tr>
<tr>
<td>Household Dietary Diversity</td>
<td>Index</td>
</tr>
<tr>
<td>Caloric intake</td>
<td>Index</td>
</tr>
<tr>
<td>FCS</td>
<td>Score calculated using the frequency of consumption of different food groups consumed by the household during the 7 days before the survey. The weights are standard and can be employed in all analyses (WFP, 2008).</td>
</tr>
</tbody>
</table>
# Annex B.2: Beneficiary baseline survey indicator list

<table>
<thead>
<tr>
<th>1. General information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Household head:</td>
<td>Name:</td>
</tr>
<tr>
<td>Household members:</td>
<td>Male (adult, children)</td>
</tr>
<tr>
<td>County:</td>
<td>Ward:</td>
</tr>
<tr>
<td>GPS location:</td>
<td>Long. Lat.</td>
</tr>
<tr>
<td>Unique ID number:</td>
<td>[Supplied by project]</td>
</tr>
<tr>
<td>CIG or VMG:</td>
<td>Name:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Household income sources</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of household income generating sources (e.g. farming, livestock; wage employment; non-farm enterprise; transfers; rent; sale of assets)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Agricultural production in past year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of crop types planted, and for each:</td>
<td></td>
</tr>
<tr>
<td>Area planted</td>
<td></td>
</tr>
<tr>
<td>TIMPs and quality of planting</td>
<td></td>
</tr>
<tr>
<td>Yield per unit area</td>
<td></td>
</tr>
<tr>
<td>Marketed volume (kg) and marketed value (KSh) of each crop type</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Access to services and social networks</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in associations (number, type)</td>
<td></td>
</tr>
<tr>
<td>Number of person training days received on agriculture in the past year (by gender of trainee)</td>
<td></td>
</tr>
<tr>
<td>Number of farm visits by extension worker or advisory services in past year (by type: government, donor project, NGO, cooperative, other); satisfaction with services received.</td>
<td></td>
</tr>
<tr>
<td>Access to / use of agro-weather or market information: whether in the past year the household received weather forecasts, agro-weather advisories or market information; channels used to access the information; satisfaction with information / advisories received.</td>
<td></td>
</tr>
<tr>
<td>Access to credit: Whether the household has a loan / debt in the last month, source (e.g. informal or formal institution type), and value of loan.</td>
<td></td>
</tr>
</tbody>
</table>
## Annex C: Indicator reference sheets

### Indicator #1

**Name of Indicator:** Beneficiaries’ satisfaction with consideration of their views and needs in the investment planning process (%), disaggregated by gender

### DESCRIPTION

**Precise Definition:**

**Beneficiaries:** The primary group of direct project beneficiaries targeted by KCSAP are members of CIGs and VMGs. They will be beneficiaries of Community Agricultural Investment Plans (CAIP).

**Satisfaction:** The expressed contentment on a predefined scale about the participatory planning process of CAIP, specifically whether the respondent agrees that his/her views and needs are adequately reflected in the CAIP.

This indicator is the percentage of direct project beneficiaries surveyed who are members of CIGs and VMGs and who are satisfied with the CAIP development process.

**Unit of Measure:** Percentage

**Disaggregated by:**
- Gender (male, female)
- County, ward

**Justification & Management Utility:** Reflects target beneficiary satisfaction, feedback can be used to improve project services

### PLAN FOR DATA COLLECTION

**Data Sources:** Quarterly survey to verify beneficiary household data

**Data Collection Method:** CIG/VMG member household survey

**Calculation:** Ratio of number of beneficiaries satisfied with the investment planning process (n) to the total number of beneficiaries surveyed (N): \( \frac{n}{N} \times 100 \)

**Frequency of Data Collection:** Quarterly
Indicator #1

**Name of Indicator:** Beneficiaries' satisfaction with consideration of their views and needs in the investment planning process (%, disaggregated by gender)

**Description**

**Precise Definition:**

**Beneficiaries:** The primary group of direct project beneficiaries targeted by KCSAP are members of CIGs and VMGs. They will be beneficiaries of Community Agricultural Investment Plans (CAIP).

**Satisfaction:** The expressed contentment on a predefined scale about the participatory planning process of CAIP, specifically whether the respondent agrees that his/her views and needs are adequately reflected in the CAIP.

This indicator is the percentage of direct project beneficiaries surveyed who are members of CIGs and VMGs and who are satisfied with the CAIP development process.

**Unit of Measure:** Percentage

**Disaggregated by:**
- Gender (male, female)
- County, ward

**Justification & Management Utility:** Reflects target beneficiary satisfaction, feedback can be used to improve project services.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Quarterly survey to verify beneficiary household data

**Data Collection Method:** CIG/VMG member household survey

**Calculation:**

\[
\text{Ratio of number of beneficiaries satisfied with the investment planning process (n) to the total number of beneficiaries surveyed (N):} \\
\frac{n}{N} \times 100
\]

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** CPCU & CTAC

**DATA REPORTING**

**Data reporting tool:** Results from the quarterly survey are input by the CPCU into the PMIS

**Data Aggregation:** Data is aggregated in the PMIS across counties (but always shown as disaggregated totals by gender)

Indicator #2

**Name of Indicator:** Beneficiaries satisfied with relevance, timeliness and effectiveness of TIMP advisory services received (%, disaggregated by gender)

**Description**

**Precise Definition:**

**Beneficiaries:** The primary group of direct project beneficiaries targeted by KCSAP are members of CIGs and VMGs. They will be beneficiaries of advisory services provided by service providers or county technical departments to support the adoption of CSA TIMPs.

**Satisfaction:** Satisfaction refers to the respondents expressed view about how the service provider is performing overall, and specifically with respect to their perception of the relevance, timeliness, and effectiveness of the services received. This is expressed on a pre-defined and annotated scale for the respondent to select from.

This indicator is the percentage of direct project beneficiaries surveyed who are members of CIGs and VMGs and who are satisfied with the relevance, timeliness and effectiveness TIMP advisory services received.

**Unit of Measure:** Percentage

**Disaggregated by:**
- Gender (male, female)
- County, ward

**Justification & Management Utility:** This indicator is a PAD results framework indicator. It also provides CPCUs with regular feedback on beneficiary satisfaction.
PLAN FOR DATA COLLECTION

Data Sources: Quarterly survey to verify beneficiary household data

Data Collection Method: Ratio of number of beneficiaries satisfied with the TIMP advisory services received (n) to the total number of beneficiaries surveyed (N): \( \frac{n}{N} \times 100 \).

Frequency of Data Collection: Quarterly

Responsibility for Data Collection: CPCU & CTAC

DATA REPORTING

Data reporting tool: Results from the quarterly survey are input by the CPCU into the PMIS.

Data Aggregation: Data is aggregated in the PMIS across counties (but always shown as disaggregated totals by gender)

Data Reporting: Aggregated indicator values are reported by CPCUs in the quarterly project report following data collection, and are reported in the annual reports by the NPCU.

Indicator #3

Name of Indicator: Agriculture extension workers’ technical advisory capacity improved

DESCRIPTION

Precise Definition:

Agriculture extension workers: Advisory services will be provided in the project by contracted service providers and county technical departments (CTDs) with support from sub-CTD and CPCU staff.

Technical advisory capacity: Technical advisory capacity refers to their understanding of CSA, knowledge of CSA TIMPs, mastery of methods for providing effective advisory services, and management of the advisory process in order to provide relevant and timely services. Technical advisory capacity can be described through a number of specific sub-indicators of each of these dimensions, and measured through a combination of qualitative and quantitative methods.

This indicator measures the percentage of agricultural extension workers (SPs, CTDs, sub-CTDs and CPCU staff engaged in extension) reporting an improvement in their capacities.

Unit of Measure: percentage

Disaggregated by:
- County
- Employment type (SPs, CTDs, sub-CTDs and CPCU staff)
- Gender (male, female)

**Justification & Management Utility:** This indicator monitors change in capacities, and can be useful to inform revisions of capacity building activities.

### PLAN FOR DATA COLLECTION

**Data Sources:** Contracted consultant to conduct capacity assessment

**Data Collection Method:** Combination of qualitative and quantitative methods applied to a sample of extension workers by the contracted consultant.

**Frequency of Data Collection:** Baseline and mid-term

**Responsibility for Data Collection:** Contracted consultant

### DATA REPORTING

**Data Reporting tool:** Consultant report submitted to Component 1 leader

**Data Aggregation:** -

**Data Reporting:** Component 1 leader inputs results into PMIS, and uses results to revise capacity building plans.

### Indicator #4

**Name of Indicator:** Grievances registered related to delivery of project benefits at community, ward and county levels that are actually addressed (percentage)*

**DESCRIPTION**

**Precise Definition:**

Grievances received: The KCSAP Extension Manual outlines a Grievance Redress Mechanism (GRM) in which complaints can be received at CIG, ward or county levels. At each level, complaints are logged. At county level, all complaints are entered into a digital grievance documentation system and all subsequent actions and the results of those actions are recorded. Numbers of grievances received should be aggregated from indicators #7, #10 and #19.

Grievances addressed: A grievance is considered to have been addressed when both parties to the agreement have reached a mutually acceptable solution and this is recorded in the grievance documentation system.

The percentage of grievances that have been addressed is calculated as the number of grievances that have been
addressed divided by the total number of grievances received.

**Unit of Measure:** Percentage

**Disaggregated by:**
- Level at which grievance reported
- County, ward
- Types of grievance

**Justification & Management Utility:** This is a PAD results framework indicator and monitors the effective operation of the grievance redress mechanism

**PLAN FOR DATA COLLECTION**

**Data Sources:** GRM

**Data Collection Method:** obtaining total numbers of grievances, ongoing grievances and grievances addressed from the GRM

**Frequency of Data Collection:** Ongoing

**Responsibility for Data Collection:** CPCU M&E officers are responsible for summarizing this information at county level.

**DATA REPORTING**

**Data reporting tool:** CPCU M&E officer enters the indicator values in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in the quarterly, semi-annual and annual project reports by CPCUs and NPCU.

**Indicator #5**

**Name of Indicator:** Number of CIGs and VMGs established

**DESCRIPTION**

**Precise Definition:**

CIGs: CIG stands for Common Interest Group. CIGs are community based organisations (CBOs), such as farmer groups, women groups, youth groups, and self-help groups (SHGs) that have a mutual interest in participating in the project. Each CIG will have a membership of 20-30 beneficiaries who pay annual membership fee, and each
CIG will be organised in relation to a value chain prioritized in the PICD process.

VMGs: VMG stands for Vulnerable and Marginalized Groups. VMGs can be formed of youth, Indigenous People (IP), elderly women and men, widows/orphans, disabled, recovering substance abusers, and people living with HIV/AIDS. In the PICD process, special barazas will be held for vulnerable and marginalized members of the communities identified during the PICD process. Existing VMGs may be identified and new VMGs may be formed that target either a single category or multiple categories of VMGs to achieve the threshold of 20-30 members.

Established: All CIGs and VMGs will develop by-laws/rules/constitution/MoU and register with the department for social protection within one month of their formation. The Extension manual explains that the CPCUs are responsible for CIG/VMG identification and registration, although this may also be done in collaboration with service providers and other stakeholders.

This indicator measures the number of CIGs and VMGs that have been registered with the department of social services.

Unit of Measure: Number

Disaggregated by:
- County and ward;
- Organisation type and membership type (see Workstream 7 on data aggregation and Annex F ToRs for M&E Working Group)

Justification & Management Utility: Number of CIGs/VMGs established is a results framework indicator in the PAD, and tracks progress in forming groups of direct project beneficiaries.

PLAN FOR DATA COLLECTION

Data Sources: Certificate of registration

Data Collection Method: The CPCU should verify by visual inspection (a copy of) the certificate of registration for each CIG and VMG. A unique identifier code shall then be allocated in the PMIS for each registered CIG and VMG.

Frequency of Data Collection: Ongoing, during project implementation

Responsibility for Data Collection: CPCU is responsible for verifying certificates of registration

DATA REPORTING

Data Reporting tool: CPCU enters indicator values in PMIS.

Data Aggregation: PMIS aggregates data entry by county and by month.
**Data Reporting:** Aggregated indicator values are reported in quarterly, semi-annual and annual project report by CPCUs and NPCU.

<table>
<thead>
<tr>
<th>Indicator #6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Indicator:</strong> Number of CIG and VMG micro-project grant proposals received</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

**Precise Definition:**

**CIGs:** CIG stands for Common Interest Group. CIGs that meet criteria set out in the KCSAP Matching Grants Manual are eligible for Window I micro-project grants focusing on: (i) implementation of CSA TIMPs (70 percent); (ii) livelihood diversification (20 percent); and (iii) mainstreaming nutrition (10 percent).

**VMGs:** VMG stands for Vulnerable and Marginalized Groups. VMGs that meet criteria set out in the KCSAP Matching Grants Manual are eligible for Window I micro-project grants focusing on: (i) implementation of CSA TIMPs (60 percent); (ii) livelihood diversification (30 percent); and (iii) mainstreaming nutrition (10 percent).

**Received:** Window I micro-project grants for CIGs and VMGs are submitted to the CPCU. CPCUs shall keep documentation of all proposals received.

*This indicator measures the number of CIG and VMG micro-project grants that have been received by the CPCU.*

**Unit of Measure:** Number of grants received.

**Disaggregated by:**

- County and ward;
- Organisation type and membership type (see Workstream 7 on data aggregation and Annex F ToRs for M&E Working Group)
- Micro-project type:
  - implementation of CSA TIMPs
  - livelihood diversification
  - mainstreaming nutrition.

**Justification & Management Utility:** Monitoring the number of micro-project grants to CIGs/VMGs received is an indicator of activity progress for management, and can be compared with the number approved to identify issues and needs for improvement in the grant preparation process.
**Plan for Data Collection**

**Data Sources:** CPCU records.

**Data Collection Method:** CPCU responsible staff shall record in PMIS receipt of each micro-grant proposal received with a unique identifier code.

**Frequency of Data Collection:** Ongoing, after receipt of each proposal.

**Responsibility for Data Collection:** CPCU

**Data Reporting**

**Data Reporting Tool:** CPCU enters indicator values in PMIS. The entry of proposal receipts shall be linked with the unique identifier code of each registered CIG/VMG in order to disaggregate total numbers of grants by different organisation types and type of grant proposal (i.e. TIMP, diversification, nutrition).

**Data Aggregation:** PMIS aggregates data entry by geographic location, month, type of organisation, type of grant.

**Data Reporting:** Aggregated indicator values are reported in quarterly, semi-annual and annual project report by CPCUs and NPCU.

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**Indicator #7**

**Name of Indicator:** Number of CIG and VMG micro-project grants approved

**Description**

**Precise Definition:**

**CIGs:** CIG stands for Common Interest Group. CIGs that meet criteria set out in the KCSAP Matching Grants Manual are eligible for Window I micro-project grants focusing on: (i) implementation of CSA TIMPs (70 percent); (ii) livelihood diversification (20 percent); and (iii) mainstreaming nutrition (10 percent).

**VMGs:** VMG stands for Vulnerable and Marginalized Groups. VMGs that meet criteria set out in the KCSAP Matching Grants Manual are eligible for Window I micro-project grants focusing on: (i) implementation of CSA TIMPs (60 percent); (ii) livelihood diversification (30 percent); and (iii) mainstreaming nutrition (10 percent).

**Approved:** Window I micro-project grants for CIGs and VMGs are approved by the CPSC. Approval of micro-project grants shall be recorded in the minutes of CPSC meetings.

*This indicator measures the number of CIG and VMG micro-project grants that have been formally approved*
Unit of Measure: Number of grants approved.

Disaggregated by:

- County and ward;
- Organisation type and membership type (see Workstream 7 on data aggregation and Annex F ToRs for M&E Working Group);
- Micro-project type:
  - implementation of CSA TIMPs
  - livelihood diversification
  - mainstreaming nutrition.

Justification & Management Utility: Approval of micro-project grants to CIGs/VMGs is a results framework indicator in the PAD, and tracks progress in providing direct assistance to project beneficiaries.

PLAN FOR DATA COLLECTION

Data Sources: CPSC meeting minutes.

Data Collection Method: CPCU staff shall obtain data on the approval of micro-project grants from CPSC meeting minutes.

Frequency of Data Collection: Ongoing, after each CPSC meeting.

Responsibility for Data Collection: CPCU

DATA REPORTING

Data Reporting tool: CPCU enters indicator values in PMIS. The entry of approval data shall be linked with the unique identifier code of each registered CIG/VMG in order to disaggregate total numbers of grants by different organisation types and shall also record the type of grant approved (i.e. TIMP, diversification, nutrition).

Data Aggregation: PMIS aggregates data entry by geographic location, month, type of organisation, type of grant.

Data Reporting: Aggregated indicator values are reported in quarterly, semi-annual and annual project report by CPCUs and NPCU.
Indicator #8

Name of Indicator: Number of grievances received at CIG/VMG level

DESCRIPTION

Precise Definition:

Grievances received at CIG/VMG level: The KCSAP Extension Manual outlines a Grievance Redress Mechanism in which the secretary of each CIG and VMG is responsible for registering grievances in a complaints log book / register. Grievances received at CIG/VMG level and any actions taken to address them shall be reported immediately by the CIG/VMG secretary to the CPCU M&E Officer.

This indicator measures the number of grievances that have been reported by each CIG/VMG to the CPCU M&E Officer.

Unit of Measure: Number of grievances recorded.

Disaggregated by:

- County, ward, CIG or VMG

Justification & Management Utility: Number of grievances addressed is a results framework indicator in the PAD. This indicator tracks the number of grievances received and logged, which can be compared with those addressed to monitor the % of grievances addressed.

PLAN FOR DATA COLLECTION

Data Sources: CIG/VMG secretary reports any complaints logged to the CPCU M&E Officer.

Data Collection Method: CIG/VMG secretary receives and logs any received complaints.

Frequency of Data Collection: Ongoing, immediately after receipt of complaint.

Responsibility for Data Collection: CIG/VMG secretary

DATA REPORTING

Data Reporting tool: CPCU enters all complaints reported by CIG/VMG secretaries in the PMIS.

Data Aggregation: PMIS aggregates data entry by geographic location, CIG/VMG, month.

Data Reporting: Aggregated indicator values are reported in quarterly project reports by CPCU and NPCU.
### Indicator #9

**Name of Indicator:** Number of grievances received at CIG/VMG level that have been resolved

#### DESCRIPTION

**Precise Definition:**

- **Grievances received at CIG/VMG level:** The KCSAP Extension Manual outlines a Grievance Redress Mechanism in which the secretary of each CIG and VMG is responsible for registering grievances in a complaints log book / register. Grievances received at CIG/VMG level and any actions taken to address them shall be reported immediately by the CIG/VMG secretary to the CPCU M&E Officer.

- **Grievances resolved:** The grievance redress mechanism shall include full documentation of all actions taken to address grievances. Redressive action shall continue as per the project grievance redress mechanism until each grievance is resolved. Redressive actions may be taken by staff or other actors at different levels, depending on the nature of the grievance. When each grievance has been resolved, this shall be recorded in the grievance redress documentation system, which is part of the PMIS.

This indicator measures the number of grievances that have been reported by each CIG/VMG to the CPCU M&E Officer and that have been resolved.

**Unit of Measure:** Number of grievances resolved.

**Disaggregated by:**

- County, ward, CIG or VMG

**Justification & Management Utility:** Number of grievances addressed is a results framework indicator in the PAD. This indicator tracks the number of grievances that have been resolved, which can be compared with the number of grievances received to assess effectiveness of the grievance redress mechanism.

#### PLAN FOR DATA COLLECTION

**Data Sources:** All actors in the project grievance redress mechanism have responsibility for documenting their actions and the status of the grievance they are working on.

**Data Collection Method:** Responsible staff documents when the grievance is resolved.

**Frequency of Data Collection:** Ongoing, immediately after resolution of each grievance.

**Responsibility for Data Collection:** All relevant actors in the project grievance redress mechanism.

**DATA REPORTING**
**Indicator #9**

**Name of Indicator:** Number of grievances received at CIG/VMG level that have been resolved

**DESCRIPTION**

**Precise Definition:**

Grievances received at CIG/VMG level:
The KCSAP Extension Manual outlines a Grievance Redress Mechanism in which the secretary of each CIG and VMG is responsible for registering grievances in a complaints log book / register. Grievances received at CIG/VMG level and any actions taken to address them shall be reported immediately by the CIG/VMG secretary to the CPCU M&E Officer.

Grievances resolved:
The grievance redress mechanism shall include full documentation of all actions taken to address grievances. Redressive action shall continue as per the project grievance redress mechanism until each grievance is resolved. Redressive actions may be taken by staff or other actors at different levels, depending on the nature of the grievance. When each grievance has been resolved, this shall be recorded in the grievance redress documentation system, which is part of the PMIS.

This indicator measures the number of grievances that have been reported by each CIG/VMG to the CPCU M&E Officer and that have been resolved.

**Unit of Measure:** Number of grievances resolved.

**Disaggregated by:**
- County
- List of mandatory topics for training (see Workstream 7 on data aggregation and Annex F ToRs for M&E Working Group)

**Justification & Management Utility:** Number of grievances addressed is a results framework indicator in the PAD. This indicator tracks the number of grievances that have been resolved, which can be compared with the number of grievances received to assess effectiveness of the grievance redress mechanism.

**PLAN FOR DATA COLLECTION**

**Data Reporting tool:** PMIS will automatically show the status of each grievance received.

**Data Aggregation:** PMIS aggregates data entry by geographic location, CIG/VMG, month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCU and NPCU.

---

**Indicator #10**

**Name of Indicator:** Number of person training days delivered for sub-county staff

**DESCRIPTION**

**Precise Definition:**

Training for sub-county staff: Sub-county technical department (CTD) staff play key roles in the PICD process. The KCSAP Extension Manual explains that training will be provided by the CPCU to sub-CTD staff in the KCSAP extension process, and sub-CTD staff will together with the CPCU staff lead the community mobilization and planning process leading to the elaboration of Community Integrated Action Plans (CIAPs). Sub-CTDs also lead the elaboration of work plans to address the CIAP and develop problem statements that are the basis for identifying service providers, participate in flagging of opportunities for CIG/VMG formation and screen enterprise development plans. In areas where no service providers have been contracted, sub-CTDs play the role of service provision to CIGs/VMGs in micro- and sub-project development and implementation.

Person days of training: Participation of an individual in a full day of training is recorded as one person day of training. Thus, a 2-day course for 10 people would be recorded as 20 person days of training.

This indicator measures the number of person training days that have been delivered to sub-county staff.

**Unit of Measure:** Number of person training days

**Disaggregated by:**
- County
- List of mandatory topics for training (see Workstream 7 on data aggregation and Annex F ToRs for M&E Working Group)

**Justification & Management Utility:** This indicator tracks activities to develop capacities at sub-county level to support implementation of micro- and sub-projects.

**PLAN FOR DATA COLLECTION**

**Data Sources:** CPCU.
Data Collection Method: CPCU records the number of person days of training for sub-CTD staff from all training activity reports.

Frequency of Data Collection: Monthly

Responsibility for Data Collection: CPCU

DATA REPORTING

Data Reporting tool: CPCU enters numbers of person days of training in the PMIS.

Data Aggregation: PMIS aggregates data entry by geographic location and month.

Data Reporting: Aggregated indicator values are reported in quarterly, semi-annual and annual project reports by CPCU and NPCU.

Indicator #11

Name of Indicator: Number of functional CDDCs

DESCRIPTION

Precise Definition:

CDDCs: CDDC stands for Community Driven Development Committee. A CDDC will be formed in each ward by election of 13 representatives from participants in the PICD process, CIAP barazers and CIG/VMG leadership. The CDDCs play important roles in micro-projects, including coordination, oversight, procurement and participatory M&E of micro-projects.

Functional: The KCSAP Extension Manual sets out the following criteria for functional CDDCs:
- Elected executive committee members (including at least 30% women)
- Registration with department of social protection
- Sub-committees for procurement and social accountability and integrity established, including at least 30% women, and have been trained
- Meeting at least 4 times per year
- A bank account has been opened and a cheque book received

After approval of micro-projects, functional operation is indicated by:
- A Memorandum of Understanding signed between the CDDC and CPCU
- A sub-committee to manage the micro-project (PMC) has been established and trained
- Monthly progress reports have been submitted to the CPCU
- Monthly financial reports have been submitted to the CPCU

A functional CDDC is a CDDC that meets all of the criteria appropriate to the phase of operation.

This indicator measures the number of CDDCs that have been formally registered and that meet all of the functional criteria appropriate to the phase of micro-project development.
**Unit of Measure:** Number of fully functional CDDCs

**Disaggregated by:** County and ward.

**Justification & Management Utility:** This indicator tracks the development status of CDDCs throughout the project lifetime. It can be used to identify counties or wards where CDDC development is insufficient to support effective implementation of micro- and sub-projects.

**PLAN FOR DATA COLLECTION**

**Data Sources:** CPCU uses CDDC development tracker (Annex D.3) to collect data from each CDDC

**Data Collection Method:** CDDC functionality is measured using the CDDC development tracker (Annex D.3).

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** CPCU

**DATA REPORTING**

**Data Reporting tool:** CPCU enters CDDC tracker data into PMIS.

**Data Aggregation:** PMIS aggregates data entry by county and by quarter.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCUs and NPCU.

**Indicator #12**

**Name of Indicator:** Number of grievances received at CDDC (ward) level

**DESCRIPTION**

**Precise Definition:**

Grievances received at CDDC (ward) level: The KCSAP Extension Manual outlines a Grievance Redress Mechanism in which grievances can be received at any level, including the CDDC/ward level. Each CDDC should have a person responsible for receiving and logging grievances in a complaints log book / register. Grievances received at CDDC level and any actions taken to address them shall be reported immediately by the responsible person to the CPCU M&E Officer.

*This indicator measures the number of grievances that have been reported by each CDDC to the CPCU M&E Officer.*
**Unit of Measure:** Number of grievances recorded.

**Disaggregated by:**
- County, ward

**Justification & Management Utility:** Number of grievances addressed is a results framework indicator in the PAD. This indicator tracks the number of grievances received and logged, which can be compared with those addressed to monitor the % of grievances addressed.

**PLAN FOR DATA COLLECTION**

**Data Sources:** CDDC responsible person reports any complaints logged to the CPCU M&E Officer.

**Data Collection Method:** CDDC responsible person receives and logs any received complaints.

**Frequency of Data Collection:** Ongoing, immediately after receipt of complaint.

**Responsibility for Data Collection:** CDDC responsible person

**DATA REPORTING**

**Data Reporting tool:** CPCU enters all complaints reported by CDDCs in the PMIS.

**Data Aggregation:** PMIS aggregates data entry by geographic location, CDDC, month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCU and NPCU.

**Indicator #13**

**Name of Indicator:** Number of grievances received at CDDC level that have been resolved

**DESCRIPTION**

**Precise Definition:**

Grievances received at CDDC (ward) level: The KCSAP Extension Manual outlines a Grievance Redress Mechanism in which grievances can be received at any level, including the CDDC/ward level. Each CDDC should have a person responsible for receiving and logging grievances in a complaints log book / register. Grievances received at CDDC level and any actions taken to address them shall be reported immediately by the responsible person to the CPCU M&E Officer.

Grievances resolved: The grievance redress mechanism shall include full documentation of all actions taken to address grievances. Redressive action shall continue as per the project grievance redress mechanism until each
This indicator measures the number of grievances that have been reported by each CDDC to the CPCU M&E Officer and that have been resolved.

**Unit of Measure:** Number of grievances resolved.

**Disaggregated by:**
- County, ward, CIG or VMG

**Justification & Management Utility:** Number of grievances addressed is a results framework indicator in the PAD. This indicator tracks the number of grievances that have been resolved, which can be compared with the number of grievances received to assess effectiveness of the grievance redress mechanism.

**PLAN FOR DATA COLLECTION**

**Data Sources:** All actors in the project grievance redress mechanism have responsibility for documenting their actions and the status of the grievance they are working on.

**Data Collection Method:** Responsible staff documents when the grievance is resolved.

**Frequency of Data Collection:** Ongoing, immediately after resolution of each grievance.

**Responsibility for Data Collection:** All relevant actors in the project grievance redress mechanism.

**DATA REPORTING**

**Data Reporting tool:** PMIS will automatically show the status of each grievance received.

**Data Aggregation:** PMIS aggregates data entry by geographic location, CIG/VMG, month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCU and NPCU.
## Indicator #14

**Name of Indicator:** Number of CIAPs ratified

### DESCRIPTION

**Precise Definition:**

CIAPs: CIAPs are Community Integrated Action Plans. CIAPs are integrated action plans produced at ward level. They contain, among other things, identification and prioritization of potential community micro-projects, sub-projects and CIGs/VMGs.

Ratified: The process of elaborating and ratifying CIAPs is described in the KCSAP Extension Manual. A draft CIAP is presented at a baraza in each ward. During the baraza, the CIAP is verified, modified, ratified and adopted.

This indicator measures the number of CIAPs that have been formally ratified during community level barazas.

**Unit of Measure:** Number

**Disaggregated by:** County and ward.

**Justification & Management Utility:** Ratification of CIAPs is a key milestone in the PICD process and an indicator of community participation in micro- and sub-project planning.

### PLAN FOR DATA COLLECTION

**Data Sources:** Documented minutes of each baraza held.

**Data Collection Method:** CPCU staff facilitate each baraza and document minutes, including whether the CIAP was ratified by those present or not.

**Frequency of Data Collection:** Ongoing, after each baraza held.

**Responsibility for Data Collection:** CPCU

### DATA REPORTING

**Data Reporting tool:** CPCU enters indicator values in PMIS.

**Data Aggregation:** PMIS aggregates data entry by county and by month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by CPCUs and NPCU.
<table>
<thead>
<tr>
<th>Indicator #15</th>
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</thead>
<tbody>
<tr>
<td><strong>Name of Indicator:</strong></td>
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<tr>
<td><strong>DESCRIPTION</strong></td>
</tr>
<tr>
<td><strong>Precise Definition:</strong></td>
</tr>
<tr>
<td>Ward citizen engagement meetings: Obtaining feedback on project implementation is critical to improving project implementation. Forums for exchange of experience are also an important mechanism to enable learning by project participants. The KCSAP communications plan includes plans for quarterly citizen engagement meetings at the ward level.</td>
</tr>
<tr>
<td>This indicator measures the number of ward citizen engagement meetings that are held.</td>
</tr>
<tr>
<td><strong>Unit of Measure:</strong></td>
</tr>
<tr>
<td><strong>Disaggregated by:</strong></td>
</tr>
<tr>
<td><strong>Justification &amp; Management Utility:</strong> Tracking the convening of ward citizen engagement meetings enables county and national project staff to monitor whether opportunities for feedback and learning are being provided at ward level.</td>
</tr>
<tr>
<td><strong>PLAN FOR DATA COLLECTION</strong></td>
</tr>
<tr>
<td><strong>Data Sources:</strong></td>
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<tr>
<td><strong>Data Collection Method:</strong></td>
</tr>
<tr>
<td><strong>Frequency of Data Collection:</strong></td>
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<tr>
<td><strong>Responsibility for Data Collection:</strong></td>
</tr>
<tr>
<td><strong>DATA REPORTING</strong></td>
</tr>
<tr>
<td><strong>Data Reporting tool:</strong></td>
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<tr>
<td><strong>Data Aggregation:</strong></td>
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<tr>
<td><strong>Data Reporting:</strong></td>
</tr>
<tr>
<td>Indicator #16</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td><strong>Name of Indicator:</strong> Number of participants in ward citizen engagement meetings (by gender)</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

**Precise Definition:**

Ward citizen engagement meetings: Obtaining feedback on project implementation is critical to improving project implementation. Forums for exchange of experience are also an important mechanism to enable learning by project participants. The KCSAP communications plan includes plans for quarterly citizen engagement meetings at the ward level.

*This indicator measures the number of participants in ward citizen engagement meetings that are held, including disaggregation by gender.*

**Unit of Measure:** Number

**Disaggregated by:** County and ward; gender.

**Justification & Management Utility:** Tracking the number of participants by gender in ward citizen engagement meetings enables county and national project staff to monitor the extent of participation and whether participation is providing equitable opportunities.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Documented minutes of each citizen engagement meeting.

**Data Collection Method:** CPCU staff facilitate each citizen engagement meeting and document minutes and participant list.

**Frequency of Data Collection:** Ongoing, after each citizen engagement meeting.

**Responsibility for Data Collection:** CPCU

**DATA REPORTING**

**Data Reporting tool:** CPCU records number of participants at each meeting in PMIS.

**Data Aggregation:** PMIS aggregates data entry by county, ward and by month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by CPCUs and NPCU.
<table>
<thead>
<tr>
<th>Indicator #17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Indicator:</strong> Number of functional CVCDCs</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

**Precise Definition:**

CVCDCs: CVCDC stands for County Value Chain Development Committee. CVCDCs are formed at county level, one per value chain. The main role of CVCDCs is to negotiate and sign contracts with service providers on behalf of CIG/VMG members. The contracts are based on an Enterprise Activity Implementation Schedule (EAIS), which is an accountable document used by beneficiaries to certify service delivery for the purpose of paying the contract fee. CVCDCs are formed as follows. Ward enterprise CDDC executive members from specific value chains will elect two representatives (male and female) to the **County Value Chain Development group** (CVCDG) as ward VC representatives. The CVCDG comprising of various ward enterprise representatives will meet at county level and elect members to **County Value Chain Development Committee** (CVCDC) that will manage their value chain extension service provision grants.

**Functional:** The main roles of the CVCDCs are to negotiate service provider contracts and to monitor and report the achievement of contract milestones and outcomes to the CPCU.

This indicator measures the number of CVCDGs and CVCDCs that are performing these functions.

**Unit of Measure:** Number of fully functional CVCDCs

**Disaggregated by:** County and value chain.

**Justification & Management Utility:** CVCDCs play a key role in contracting of advisory services. This indicator tracks the development status of CVCDCs throughout the project lifetime. It can be used to identify counties where CVCDC functioning is insufficient to support effective provision of advisory services.

**PLAN FOR DATA COLLECTION**

**Data Sources:** CPCU uses CVCDC tracker *(Annex D.4)* to collect data from each CVCDC

**Data Collection Method:** CVCDC functionality is measured using the CVCDC development tracker *(Annex D.4).*

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** CPCU

**DATA REPORTING**

**Data Reporting tool:** CPCU enters CVCDC tracker data into PMIS.
**Data Aggregation:** PMIS aggregates data entry by county and by quarter.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCUs and NPCU.

<table>
<thead>
<tr>
<th>Indicator #18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Indicator:</strong> Number of person training days delivered to county staff</td>
</tr>
<tr>
<td><strong>DESCRIPTION</strong></td>
</tr>
<tr>
<td><strong>Precise Definition:</strong></td>
</tr>
<tr>
<td>Training for county staff: County Project Coordination Units (CPCUs), County Technical Advisory Committees (CTACs) and the staff of county technical department (CTD) play key roles throughout the project, from induction through to project completion. CTDs will play especially important roles in areas where service providers are not contracted. NPCU will be responsible for supervising the delivery of training in a variety of topics to the county staff.</td>
</tr>
<tr>
<td>Person training days: Participation of an individual in a full day of training is recorded as one person day of training. Thus, a 2-day course for 10 people would be recorded as 20 person days of training.</td>
</tr>
<tr>
<td>This indicator measures the number of person training days that have been delivered to staff of CPCUs, CTACs and CTDs.</td>
</tr>
<tr>
<td><strong>Unit of Measure:</strong> Number of person training days</td>
</tr>
<tr>
<td><strong>Disaggregated by:</strong></td>
</tr>
<tr>
<td>- County</td>
</tr>
<tr>
<td>- List of mandatory topics for training (see Workstream 7 on data aggregation and Annex E ToRs for M&amp;E Working Group)</td>
</tr>
<tr>
<td><strong>Justification &amp; Management Utility:</strong> This indicator tracks activities to develop capacities at county level to support implementation of all project activities.</td>
</tr>
</tbody>
</table>

**PLAN FOR DATA COLLECTION**

| Data Sources: CPCU. |
| Data Collection Method: CPCU records the number of person days of training for county level staff from all training activity reports. |
**Frequency of Data Collection:** Monthly

**Responsibility for Data Collection:** CPCU

### DATA REPORTING

**Data Reporting tool:** CPCU enters numbers of person days of training in the PMIS.

**Data Aggregation:** PMIS aggregates data entry by geographic location and month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCUs and the NPCU.

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**Indicator #19**

**Name of Indicator:** Number of CSA investment plans approved

### DESCRIPTION

**Precise Definition:**

CSA investment plans (CSAIP): The KCSAP Matching Grants Manual states that counties are eligible for sub-grants if the sub-grant is in line with the county CSA plans and the CSA plan has been incorporated in the county integrated development plan (CIDP).

Approved: CSA plans that have been formally approved by the county government.

**This indicator measures the number of counties that have approved CSA plans.**

**Unit of Measure:** Number of counties with approved CSA plans

**Disaggregated by:** County

**Justification & Management Utility:** Approval of a CSA plan is a pre-condition for sub-grant eligibility. This indicator tracks which counties have completed CSA plan approval and are eligible for sub-grants.

### PLAN FOR DATA COLLECTION

**Data Sources:** CSA plan approval documentation produced by county government.

**Data Collection Method:** CPCU visually confirms CSA plan approval document.

**Frequency of Data Collection:** Ongoing
**Responsibility for Data Collection:** CPCU

**DATA REPORTING**

**Data Reporting tool:** CPCU enters confirmation of CSA plan approval into PMIS.

**Data Aggregation:** PMIS aggregates data entry by county and by month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCUs and NPCU.

<table>
<thead>
<tr>
<th>Indicator #20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Indicator:</strong> Number of counties that have integrated CSAIP in county annual plan and CIDP</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

**Precise Definition:**

CSA investment plans (CSAIP): The KCSAP Matching Grants Manual states that counties are eligible for sub-grants if the sub-grant is in line with the county CSA plans and the CSA plan has been incorporated in the county integrated development plan (CIDP).

Integrated: Integration of CSA plans into the CIDP is demonstrated when the main contents of the CSA plan is included in the programmes and priorities of the CIDP.

*This indicator measures the number of counties that have integrated CSA plans into the CIDP.*

**Unit of Measure:** Number of counties

**Disaggregated by:** County

**Justification & Management Utility:** Integration of the CSA plan into the CIDP is a pre-condition for sub-grant eligibility. This indicator tracks which counties have completed CSA plan – CIDP integration process and are eligible for sub-grants.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Integration is indicated by the contents of CIDPs.

**Data Collection Method:** CPCUs assess whether CSA plans are appropriately reflected in CIDPs.

**Frequency of Data Collection:** Ongoing

**Responsibility for Data Collection:** CPCU
## DATA REPORTING

<table>
<thead>
<tr>
<th>Data Reporting tool:</th>
<th>CPCU enters confirmation of integration into the PMIS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Aggregation:</td>
<td>PMIS aggregates data entry by county and by month.</td>
</tr>
<tr>
<td>Data Reporting:</td>
<td>Aggregated indicator values are reported in quarterly project reports by CPCUs and NPCU.</td>
</tr>
</tbody>
</table>

### Indicator #21

**Name of Indicator:** Number of county sub-project grant proposals received

**DESCRIPTION**

**Precise Definition:**

**County sub-projects:** 17 counties in semi-arid and medium-to-high potential areas and 7 counties in the NEDI region are eligible for county sub-grants under sub-component investment Window II that support to county governments to implement CSA interventions that provide public goods and are ward-specific or span several wards.

**Received:** Window II sub-project grants to counties submitted to are submitted to the NPCU. The NPCU shall record each proposal received.

*This indicator measures the number of county sub-project grants that have been received by the NPCU.*

**Unit of Measure:** Number of grants received.

**Disaggregated by:**

- County;
- Sub-project type (to be confirmed by M&E Working Group):
  - Sustainable landscape management;
  - Water management;
  - Animal health
  - Crop-livestock integration
  - Energy
  - Market access
Livelihood diversification.

**Justification & Management Utility:** Receipt of sub-project grant proposals is an indicator of progress towards project activities, and can be compared with the indicator on approval of sub-project grants to identify issues and options for improving the sub-grant preparation process.

**PLAN FOR DATA COLLECTION**

**Data Sources:** NPCU.

**Data Collection Method:** NPCU staff shall record each county sub-project proposal received in the PMIS, and give each proposal received a unique identifier number.

**Frequency of Data Collection:** Ongoing, after receipt of each proposal.

**Responsibility for Data Collection:** NPCU

**DATA REPORTING**

**Data Reporting tool:** NPCU enters indicator values in PMIS.

**Data Aggregation:** PMIS aggregates data entry by geographic location, month, type of grant.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.

<table>
<thead>
<tr>
<th>Indicator #22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Indicator:</strong> Number of county sub-project grants approved</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

**Precise Definition:**

**County sub-projects:** 17 counties in semi-arid and medium-to-high potential areas and 7 counties in the NEDI region are eligible for county sub-grants under sub-component investment Window II that support to county governments to implement CSA interventions that provide public goods and are ward-specific or span several wards.

**Approved:** Window II sub-project grants to counties are approved by the NPSC. Approval of sub-project grants shall be recorded in the minutes of NPSC meetings.

**This indicator measures the number of county sub-project grants that have been formally approved by the NPSC.**

**Unit of Measure:** Number of grants approved.
Disaggregated by:

- County;
- Sub-project type (to be confirmed by M&E Working Group):
  - Sustainable landscape management;
  - Water management;
  - Animal health
  - Crop-livestock integration
  - Energy
  - Market access
  - Livelihood diversification.

**Justification & Management Utility:** Approval of sub-project grants to counties is a results framework indicator in the PAD, and tracks progress in providing direct assistance to project beneficiaries.

**PLAN FOR DATA COLLECTION**

**Data Sources:** NPSC meeting minutes.

**Data Collection Method:** NPCU staff shall obtain data on the approval of sub-project grants from NPSC meeting minutes.

**Frequency of Data Collection:** Ongoing, after each NPSC meeting.

**Responsibility for Data Collection:** NPCU

**DATA REPORTING**

**Data Reporting tool:** NPCU enters indicator values in PMIS.

**Data Aggregation:** PMIS aggregates data entry by geographic location, month, type of grant.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.
## Indicator #23

**Name of Indicator:** Number of cross-county sub-project grants received

### DESCRIPTION

#### Precise Definition:

*Cross-county sub-projects:* Seven counties in the NEDI region are eligible for sub-grants for investments in Window II that cut across counties. These are CSA interventions under the priority livestock sub-sector investments identified by the Needs Assessment and Investment Plan for NEDI counties.

*Received:* Window II sub-project grants to NEDI counties are submitted to the NPCU. The NPCU shall record each proposal received.

This indicator measures the number of cross-county sub-project grants that have been received by the NPCU.

**Unit of Measure:** Number of grants received.

**Disaggregated by:**

- Counties;
- Sub-project type (to be confirmed by M&E Working Group):
  - rehabilitation and equipping of selected abattoirs;
  - development of disease free zones;
  - breeding programs and animal feed production.

**Justification & Management Utility:** Receipt of sub-project grant proposals is an indicator of progress towards project activities, and can be compared with the indicator on approval of sub-project grants to identify issues and options for improving the sub-grant preparation process.

### PLAN FOR DATA COLLECTION

**Data Sources:** NPCU.

**Data Collection Method:** NPCU staff shall record each county sub-project proposal received in the PMIS, and give each proposal received a unique identifier number.

**Frequency of Data Collection:** Ongoing, after receipt of each proposal.

**Responsibility for Data Collection:** NPCU
### Indicator #24

**Name of Indicator:** Number of cross-county sub-project grants approved

**DESCRIPTION**

**Precise Definition:**

*Cross-county sub-projects:* Seven counties in the NEDI region are eligible for sub-grants for investments in Window II that cut across counties. These are CSA interventions under the priority livestock sub-sector investments identified by the Needs Assessment and Investment Plan for NEDI counties.

*Approved:* Window II sub-project grants to NEDI counties are approved by the NPSC. Approval of sub-project grants shall be recorded in the minutes of NPSC meetings.

*This indicator measures the number of cross-county sub-project grants that have been formally approved by the NPSC.*

**Unit of Measure:** Number of grants approved.

**Disaggregated by:**

- Counties;
- Sub-project type (to be confirmed by M&E Working Group):
  - rehabilitation and equipping of selected abattoirs;
  - development of disease free zones;
  - breeding programs and animal feed production.

**Justification & Management Utility:** Approval of sub-project grants for cross-county investments is a results framework indicator in the PAD, and tracks progress in providing direct assistance to project beneficiaries.

**PLAN FOR DATA COLLECTION**

**Data Reporting tool:** NPCU enters indicator values in PMIS.

**Data Aggregation:** PMIS aggregates data entry by geographic location, month, type of grant.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.
Data Sources: NPSC meeting minutes.

Data Collection Method: NPCU staff shall obtain data on the approval of sub-project grants from NPSC meeting minutes.

Frequency of Data Collection: Ongoing, after each NPSC meeting.

Responsibility for Data Collection: NPCU

DATA REPORTING

Data Reporting tool: NPCU enters indicator values in PMIS.

Data Aggregation: PMIS aggregates data entry by geographic location, month, type of grant.

Data Reporting: Aggregated indicator values are reported in quarterly project report by NPCU.

Indicator #25

Name of Indicator: Number of grievances received at county level

DESCRIPTION

Precise Definition:

Grievances received at county level: The KCSAP Extension Manual outlines a Grievance Redress Mechanism in which grievances can be received at any level, including the CPCU level. Each CPCU should have a person responsible for receiving and logging grievances in a complaints log book / register. Grievances received at CPCU level and any actions taken to address them shall be reported immediately by the responsible person to the CPCU M&E Officer.

This indicator measures the number of grievances that have been reported by each CPCU to the CPCU M&E Officer.

Unit of Measure: Number of grievances recorded.

Disaggregated by:

- County, ward

Justification & Management Utility: Number of grievances addressed is a results framework indicator in the PAD. This indicator tracks the number of grievances received and logged, which can be compared with those addressed to monitor the % of grievances addressed.

PLAN FOR DATA COLLECTION
**Data Sources:** CPCU responsible person reports any complaints logged to the CPCU M&E Officer.

**Data Collection Method:** CPCU responsible person receives and logs any received complaints.

**Frequency of Data Collection:** Ongoing, immediately after receipt of complaint.

**Responsibility for Data Collection:** CPCU responsible person

---

**DATA REPORTING**

**Data Reporting tool:** CPCU M&E officer enters all complaints received at CPCU in the PMIS.

**Data Aggregation:** PMIS aggregates data entry by geographic location, month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCU and NPCU.

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**Indicator #26**

**Name of Indicator:** Number of grievances received at county level that have been resolved

**DESCRIPTION**

**Precise Definition:**

Grievances received at county level: The KCSAP Extension Manual outlines a Grievance Redress Mechanism in which grievances can be received at any level, including the CPCU level. Each CPCU should have a person responsible for receiving and logging grievances in a complaints log book / register. Grievances received at CPCU level and any actions taken to address them shall be reported immediately by the responsible person to the CPCU M&E Officer.

Grievances resolved: The grievance redress mechanism shall include full documentation of all actions taken to address grievances. Redressive action shall continue as per the project grievance redress mechanism until each grievance is resolved. Redressive actions may be taken by staff or other actors at different levels, depending on the nature of the grievance. When each grievance has been resolved, this shall be recorded in the grievance redress documentation system, which is part of the PMIS.

*This indicator measures the number of grievances that have been recorded by each CPCU and that have been resolved.*

**Unit of Measure:** Number of grievances resolved.

**Disaggregated by:**

- County, ward
**Justification & Management Utility:** Number of grievances addressed is a results framework indicator in the PAD. This indicator tracks the number of grievances that have been resolved, which can be compared with the number of grievances received to assess effectiveness of the grievance redress mechanism.

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**PLAN FOR DATA COLLECTION**

**Data Sources:** All actors in the project grievance redress mechanism have responsibility for documenting their actions and the status of the grievance they are working on.

**Data Collection Method:** Responsible staff documents when the grievance is resolved.

**Frequency of Data Collection:** Ongoing, immediately after resolution of each grievance.

**Responsibility for Data Collection:** All relevant actors in the project grievance redress mechanism.

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**DATA REPORTING**

**Data Reporting Tool:** PMIS will automatically show the status of each grievance received.

**Data Aggregation:** PMIS aggregates data entry by geographic location, month.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCU and NPCU.

---

**Indicator #27**

**Name of Indicator:** Number of PPP matching grants approved

**DESCRIPTION**

**Precise Definition:**

PPP matching grants: Investment Window III in sub-component 1.2 supports productive alliances through PPP investments. These are sub-grants to private companies or producer organisations to strengthen market linkages. There are two types: matching grants to private firms and matching grants to producer organisations. Criteria for each are set out in the KCSAP Matching Grants Manual.

**Approved:** Window III sub-project grants to counties are approved by the NTAC. Approval of sub-project grants shall be recorded in the minutes of NTAC meetings.

This indicator measures the number of PPP matching grants that have been formally approved by the NTAC.

**Unit of Measure:** Number of grants approved.
Disaggregated by:

- County;
- Sub-project type:
  - Matching grants for private firms
  - Matching grants for producer organisations.

**Justification & Management Utility:** Approval of PPP matching grants to counties is a results framework indicator in the PAD, and tracks progress in providing direct assistance to project beneficiaries.

**PLAN FOR DATA COLLECTION**

**Data Sources:** NTAC meeting minutes.

**Data Collection Method:** NPCU staff shall obtain data on the approval of sub-project grants from NTAC meeting minutes.

**Frequency of Data Collection:** Ongoing, after each NTAC meeting.

**Responsibility for Data Collection:** NPCU

**DATA REPORTING**

**Data Reporting tool:** NPCU enters indicator values in PMIS.

**Data Aggregation:** PMIS aggregates data entry by geographic location, month, type of grant.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.

**Indicator #28**

**Name of Indicator:** Change in productivity of selected agricultural commodities supported by the project

**DESCRIPTION**

**Precise Definition:**

Selected agricultural commodities: The focus of this indicator is on agricultural commodities that are identified as CSA priority commodities in the target counties. Eleven commodities have been prioritised: maize, sorghum, pig...
pea, cowpea, beans, green grams, cassava, potato, banana, tomato and dairy milk.

**Productivity**: Productivity of field crops is measured as yield (kg) per unit crop area (e.g. per acre, per hectare). Productivity of livestock products is measured as yield (kg) per head of livestock.

**Percentage change in productivity**: Change in productivity is calculated as the difference between productivity of a given product at a later date \((t_2)\) and productivity of that same product at an earlier date \((t_1)\). The percentage change in productivity is calculated as \(((\text{yield}_{t2} - \text{yield}_{t1})/\text{yield}_{t1}) \times 100\). The earlier date against which yield change is compared is the baseline date.

*This indicator measures the percentage change in yield of selected priority CSA technologies compared to the baseline yield.*

**Unit of Measure**: percentage change.

**Disaggregated by**:
- Priority agricultural product:
  - Sorghum, Green grams, Irish potatoes, Millet, Pigeon peas, Cassava, Tomatoes, Bananas, Honey, Indigenous poultry (meat and eggs), and Dairy and red meat (cattle)

**Justification & Management Utility**: This is a PAD results framework indicator, measuring achievement of the PDO level outcome increase in agricultural productivity.

**PLAN FOR DATA COLLECTION**

**Data Sources**: Self-reported yields

**Data Collection Method**: For CIG members: producer organisation development tracker; for PPPs: PPP grantee or their sub-contractor

**Frequency of Data Collection**: Annual.

**Responsibility for Data Collection**: Service provider for CIG members, PPP grantee for PPP non-CIG beneficiaries

**DATA REPORTING**

**Data reporting tool**: Data from the producer organisation development tracker and PPP monitoring data is entered into the PMIS (see Workstream 7 on Data Aggregation, Annex E ToRs for M&E Working Group).

**Data Aggregation**: Data is aggregated by agricultural product type across counties

**Data Reporting**: Indicator values are reported in the annual reports by the NPCU.
**Indicator #29**

**Name of Indicator:** Percentage reduction in net GHG emissions per unit (kilogram) of product produced for selected agricultural commodities

**DESCRIPTION**

**Precise Definition:**

Net GHG emissions: Greenhouse gases (GHGs) cause global warming and climate change. Agriculture contributes about 30% of Kenya’s GHG emissions in the form of carbon dioxide (CO₂, e.g. from deforestation or soil degradation), methane (CH₄, e.g. from ruminant digestion) and nitrous oxide (N₂O, e.g. from use of nitrogen fertilizers). Woody vegetation (e.g. trees, shrubs) remove CO₂ from the atmosphere. Net GHG emissions are total emissions minus total removals of GHGs. CH₄ and N₂O are converted to carbon dioxide equivalents (CO₂e) using global warming potentials published by IPCC (i.e. 1 kg CH₄ = 25 kg CO₂e, 1 kg N₂O = 298 kg CO₂e).

GHG intensity: GHG emissions can be calculated per hectare or per unit product. Because increased food production is a fundamental policy objective in Kenya, and increasing yield (i.e. output per unit area) is a project development objective, the project will monitor and report GHG emissions per unit yield, i.e. kg CO₂e / kg product, also known as ‘GHG intensity’. An increase in GHG intensity means more environmental impact per unit of product, while a decrease means less impact is caused to the global environment per unit of product.

Product produced: For results to be consistent with international guidelines, for crop products, the product produced is defined as 1 kg of dry matter (DM) at harvest.¹⁸ For milk, the product produced is 1 kg of fat and protein corrected milk¹⁹ produced on-farm. Post-harvest losses are not considered for either crop or livestock products.

Percentage reductions in GHG intensity: The project will estimate GHG intensity for selected agricultural products at baseline, mid-term and at project completion. Analysis will compare the GHG intensity for each product at these three points, and estimate percentage reductions compared to the baseline value.

**Unit of Measure:** kilogram CO₂e per kilogram agricultural output (kg CO₂e / kg output).

**Disaggregated by:**

¹⁸ If country-specific information is unavailable, coefficients for converting fresh matter to dry matter can be taken from national sources or from http://www.fao.org/docrep/006/AD576E/ad576e00.pdf.

¹⁹ If country-specific information is unavailable, standard values for fat and protein content can be taken from http://www.fao.org/docrep/012/k7930e/k7930e00.pdf
Percentage change in GHG emission intensity of: Sorghum (kg CO2e/kg); Millet (kg CO2e/kg); Cassava (kg CO2e/kg); Dairy (kg CO2e/kg)

**Justification & Management Utility:** This is a PAD results framework indicator for achieving the Project Development Objective

### PLAN FOR DATA COLLECTION

**Data Sources:** Consultant sub-contract to collect primary data and conduct analysis to estimate kgCO2e / kg product.

**Data Collection Method:** See Annex D for detailed description of data collection and analysis procedures.

**Frequency of Data Collection:** Baseline, mid-term, project completion.

**Responsibility for Data Collection:** Consultant sub-contract.

### DATA REPORTING

**Data Reporting tool:** Consultant report to NPCU M&E officer.

**Data Aggregation:** No aggregation requirements

**Data Reporting:** NPCU M&E officer enters consultant report values into PMIS for reporting at mid-term and project completion

### Indicator #30

**Name of Indicator:** Value of agricultural output of targeted agricultural products sold by project direct beneficiaries (KSh)

**DESCRIPTION**

**Precise Definition:**

Selected agricultural commodities: The focus of this indicator is on agricultural commodities that are identified CSA priority commodities in the target counties. Eleven commodities have been prioritised: maize, sorghum, pigeon pea, cowpea, beans, green grams, cassava, potato, banana, tomato and dairy milk.

Project direct beneficiaries: Members of CIGs and VMGs, and farmers directly involved in PPP sub-grants.

Value of agricultural output sold: The value of agricultural output sold is the volume of agricultural product (kg) sold by project direct beneficiaries multiplied by the average price of sale (Ksh).

*This indicator measures the value of agricultural output of selected agricultural commodities sold by project direct beneficiaries.*
Percentage change in GHG emission intensity of:

- Sorghum (kg CO₂e/kg);
- Millet (kg CO₂e/kg);
- Cassava (kg CO₂e/kg);
- Dairy (kg CO₂e/kg).

**Justification & Management Utility:**
This is a PAD results framework indicator for achieving the Project Development Objective.

**PLAN FOR DATA COLLECTION**

**Data Sources:**
- Consultant sub-contract to collect primary data and conduct analysis to estimate kgCO₂e / kg product.

**Data Collection Method:**
See Annex D for detailed description of data collection and analysis procedures.

**Frequency of Data Collection:**
Baseline, mid-term, project completion.

**Responsibility for Data Collection:**
- Consultant sub-contract.

**DATA REPORTING**

**Data Reporting tool:**
Consultant report to NPCU M&E officer.

**Data Aggregation:**
No aggregation requirements.

**Data Reporting:**
NPCU M&E officer enters consultant report values into PMIS for reporting at mid-term and project completion.

### Indicator #31

**Name of Indicator:** Producer organization development

**DESCRIPTION**

**Precise Definition:**
- **Producer organisation:** This indicator focuses on CIGs and VMGs registered with the project.
- **Organisation development:** This indicator tracks the organisational development, functioning and
performance of CIGs and VMGs registered with the project. A scorecard is used that tracks change in a number of sub-indicators. These sub-indicators enable categorization of CIGs and VMGs as ‘forming’, ‘developing’, ‘operating’ and ‘formalised’, representing four stages of development of producer organisations.

This indicator measures change in the organisational development status of CIGs and VMGs over time.

Unit of Measure: Categorical variable

Disaggregated by:
- County, ward
- Value chain
- Type of producer organisation (see Workstream 7 Data aggregation, Annex E ToRs for M&E Working Group)

Justification & Management Utility: Development of CIGs and VMGs is essential for effectively linking beneficiary households to service providers and markets. This indicator tracks the extent to which producer organisations are developing in ways that increase the range and scale of benefits to their members.

PLAN FOR DATA COLLECTION

Data Sources: Producer organisation development tracker

Data Collection Method: See Annex D.5 for detailed description of data collection and analysis procedures.

Frequency of Data Collection: Quarterly

Responsibility for Data Collection: Service provider

DATA REPORTING

Data Reporting tool: Data from the producer organisation development tracker is entered into the PMIS.

Data Aggregation: The PMIS categorizes the development status of each CIG and VMG, and shows the % of registered CIGs and VMGs at each stage of development.

Data Reporting: The indicator value is reported in the quarterly progress reports by the CPCU and NPCU.
**Indicator #32**

**Name of Indicator:** Targeted beneficiaries in CIGs/VMGs who have adopted at least one TIMP promoted by the project

**DESCRIPTION**

**Precise Definition:**

Targeted beneficiaries in CIGs/VMGs: CIG and VMG members are registered as individuals. Often, however, members are family representatives. Agricultural production is often also organised by household. Therefore, this indicator measures adoption by households with CIG/VMG members. This definition is aligned with the definition used to set targets in the PAD results framework.

TIMPs promoted by the project: TIMP stands for Technologies, Innovations and Management Practices. Sub-component 2.1 of the project will compile an inventory of and prioritize TIMPs. Any TIMP listed as validated, recommended or prioritized in that inventory can be considered a TIMP promoted by the project. Applied and adaptive research will further add to the list of project-recommended TIMPs. Once respective training material has been issued, these TIMPs are also considered to be a TIMP promoted by the project.

Adoption: Adoption is counted when the CIG/VMG member reports that they have practiced the TIMP. Adoption of TIMPs in the baseline is not likely to equal zero. The beneficiary baseline should measure baseline adoption of TIMPs, and subsequent surveys should mark adoption as continuing (or discontinued) and count only new adoption in each reporting period.

Gender disaggregation: Unlike the number of male and female beneficiaries in CIGs/VMGs (indicator #31), where gender disaggregation is estimated based on the gender composition of CIG/VMG member households, for adoption of TIMPs, gender disaggregation considers who actually implements the TIMP. This more closely reflects the differential effects of advisory services in changing agricultural practices of men and women farmers and pastoralists, and provides service providers with feedback on the extent to which they are reaching women farmers and targeting household members appropriately. The data collection template specifies whether the practice is implemented by men, women or men and women jointly. Where adoption is jointly, numbers of men and women involved in the TIMP implementation are all counted.

The indicator aligns with the WB Corporate Results Indicator: “Farmers adopting improved agricultural technology promoted by the project (number), disaggregated by men and women.”

*This indicator measures the number of CIG and VMG members who report that men and/or women household members have adopted at least one TIMP in addition to any baseline adoption.*

**Unit of Measure:** Number

**Disaggregated by:**

- County, ward
- Value chain
- Type of producer organisation
- Gender (male, female, jointly)

**Justification & Management Utility:** This indicator is a PAD results framework indicator. It tracks adoption of TIMPs among the beneficiary population.

**PLAN FOR DATA COLLECTION**

**Data Sources:** farmer/pastoralist self-reported adoption

**Data Collection Method:** CIG members: Producer Group Tracker (see Annex D.5 for template); PPP non-CIG member beneficiaries: PPP beneficiary survey (see Annex D.7)

**Frequency of Data Collection:** Annual

**Responsibility for Data Collection:** Local extension officer: CIG members: Service provider. PPP non-CIG members: PPP grantee

**DATA REPORTING**

**Data Reporting tool:** Data from the Producer Group Tracker and PPP survey is entered into the PMIS.

**Data Aggregation:** Data is aggregated by agricultural product type across counties

**Data Reporting:** The indicator value is reported in the annual reports by the CPCU and NPCU.

**Indicator #33**

**Name of Indicator:** Head of livestock to which TIMPs are applied as a result of the project

**DESCRIPTION**

**Precise Definition:**

TIMPs promoted by the project: TIMP stands for Technologies, Innovations and Management Practices. Sub-component 2.1 of the project will compile an inventory of and prioritize TIMPs. Any TIMP listed as validated, recommended or prioritized in that inventory can be considered a TIMP promoted by the project. Applied and adaptive research will further add to the list of project-recommended TIMPs. Once respective training material has been issued, these TIMPs are also considered to be a TIMP promoted by the project.

Livestock to which TIMPs are applied: Where the intervention is applied to individual livestock (e.g.
vaccination, AI), each animal is counted as brought under the TIMP. Where the TIMP is applied to herds/flock of animals (e.g. selective culling), all animals in the herd/flock are counted as under the TIMP. Where the TIMP is applied to a land area (e.g. restoration of grazing land), count the number of animals using that land. For fodder production, the land area under fodder production is counted as an agricultural TIMP and measured in hectares (see indicator #27), but feeding is applied to individual animals or herds/flocks and is counted under this indicator. Each animal of different types (e.g. goats, cattle) are each counted as one head, with no conversion into standard livestock units. For poultry, each bird is counted as one head.

Adoption of TIMPs in the baseline is not likely to equal zero. The beneficiary baseline should measure baseline adoption of TIMPs, and subsequent surveys should mark adoption as continuing (or discontinued) and count only new adoption in each reporting period.

This indicator measures the number of livestock (including poultry) to which project-promoted TIMPs are applied in addition to any baseline adoption.

**Unit of Measure:** Number of animals

**Disaggregated by:**
- County, ward
- Animal type (cattle, sheep, goat, camel, chicken etc)
- TIMP type (TIMP list to be produced by project)

**Justification & Management Utility:** This indicator is a PAD results framework indicator. It tracks change in the scale of agricultural assets under improved management.

**PLAN FOR DATA COLLECTION**

**Data Sources:** farmer/pastoralist self-reported adoption

**Data Collection Method:** CIG members: Producer Group Tracker (see Annex D.5 for template); PPP non-CIG member beneficiaries: PPP beneficiary survey (Annex D.7)

**Frequency of Data Collection:** Annual

**Responsibility for Data Collection:** CIG members: Service provider. PPP non-CIG members: PPP grantee

**DATA REPORTING**

**Data Reporting tool:** Data from the Producer Group Tracker or PPP beneficiary survey is entered into the PMIS.

**Data Aggregation:** Data is aggregated by animal type across counties
Data Reporting: The indicator value is reported in the annual progress reports by the CPCU and NPCU.

Indicator #34

Name of Indicator: Area of land (ha) to which TIMPs are applied as a result of the project

DESCRIPTION

Precise Definition:

TIMPs promoted by the project: TIMP stands for Technologies, Innovations and Management Practices. Sub-component 2.1 of the project will compile an inventory of and prioritize TIMPs. Any TIMP listed as validated, recommended or prioritized in that inventory can be considered a TIMP promoted by the project. Applied and adaptive research will further add to the list of project-recommended TIMPs. Once respective training material has been issued, these TIMPs are also considered to be a TIMP promoted by the project.

Land to which TIMPs are applied: The indicator measures the number of new hectares under new technologies for the current reporting period (disaggregated by TIMP). For new adoption of TIMPs, count the total area of each crop type on which the TIMP is applied and sum the total area across different crop types to which new TIMPs are applied in the current reporting year. For grazing land management, count the total area of grazing land brought under the TIMP in the current reporting year. Any land to which a TIMP was applied in the baseline or a previous reporting year and a TIMP continues to be applied should be marked as “Continuing”. Subsequent surveys clearly count new adoption in each reporting period. If a hectare is under more than one improved technology type (e.g. improved seed - crop genetics and Integrated Pest Management (IPM)), the land is counted as one hectare only (i.e. no double counting).

This indicator measures the number of new hectares of cropland and grazing land to which project-promoted TIMPs are applied in addition to baseline adoption.

Unit of Measure: Number of hectares. (If acres or other measurement units are used in the survey instrument, this should be converted to hectares for reporting)

Disaggregated by:

- County, ward
- Crop type
- TIMP type (TIMP list to be produced by project)

Justification & Management Utility: This indicator is a PAD results framework indicator. It tracks
The indicator value is reported in the annual progress reports by the CPCU and NPCU.

Indicator #35

Name of Indicator: Client-days of training for CIG/VMG members provided on TIMPS

DESCRIPTION

Precise Definition:

TIMPs: TIMP stands for Technologies, Innovations and Management Practices. Sub-component 2.1 of the project will compile an inventory of and prioritize TIMPs. Any TIMP listed as validated, recommended or prioritized in that inventory can be considered a TIMP promoted by the project. Applied and adaptive research will further add to the list of project-recommended TIMPs. Once respective training material has been issued, these TIMPs are also considered to be a TIMP promoted by the project.

Person days of training: Participation of an individual in a full day of training is recorded as one person day of training. Thus, a 2-day course for 10 people would be recorded as 20 person days of training.

CIG/VMG members: This indicator counts only TIMP training provided to male and female CIG or VMG members. Other TIMP training provided as part of county or PPP sub-grants are reported in indicators #35 and #38.
**Disaggregation by gender:** Reports submitted by service providers or CTDs who provided the TIMP training should report the number of women and men receiving training and the respective number of training days.

*This indicator measures the number of person days of training provided to male and female CIG and VMG members on TIMPs.*

**Unit of Measure:** person days

**Disaggregated by:**
- County, ward
- Gender (male, female)
- TIMP type

**Justification & Management Utility:** This indicator is a PAD results framework indicator. It tracks progress in promotion of TIMPs to direct project beneficiaries.

### PLAN FOR DATA COLLECTION

**Data Sources:** Self-reported by training providers (i.e. contracted service providers and CTDs)

**Data Collection Method:** monthly activity reports by service providers and CTDs

**Frequency of Data Collection:** monthly

**Responsibility for Data Collection:** CPCU is responsible for collecting data from the SPs or CTDs

### DATA REPORTING

**Data reporting tool:** Results from each service provider/CTD report are input by the CPCU into the PMIS.

**Data Aggregation:** Data is aggregated by county and by TIMP type

**Data Reporting:** Indicator values are reported in the quarterly reports by the CPCU to the NPCU and by the NPCU in its quarterly and annual reports.

<table>
<thead>
<tr>
<th>Indicator #36</th>
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<tr>
<td><strong>Name of Indicator:</strong> Number of TIMPS promoted</td>
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**DESCRIPTION**
**Precise Definition:**

TIMPs: TIMP stands for Technologies, Innovations and Management Practices. Sub-component 2.1 of the project will compile an inventory of and prioritize TIMPs. Any TIMP listed as validated, recommended or prioritized in that inventory can be considered a TIMP promoted by the project. Applied and adaptive research will further add to the list of project-recommended TIMPs. Once respective training material has been issued, these TIMPs are also considered to be a TIMP promoted by the project.

TIMPs promoted: TIMPS promoted are TIMPs on which training is provided by service providers or CTDs. This includes training through farmer field schools, demonstration site visits or other training methods.

*This indicator measures the number of TIMPs on which training is provide to CIG and VMG members by service providers and CTDs.*

**Unit of Measure:** number of TIMPs

**Disaggregated by:**
- County, ward
- TIMP type

**Justification & Management Utility:** This indicator tracks progress in promotion of TIMPs to direct project beneficiaries. It can be compared with adoption of TIMPs as part of assessing the effectiveness of TIMP promotion.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Self-reported by training providers (i.e. contracted service providers and CTDs)

**Data Collection Method:** monthly activity reports by service providers and CTDs

**Frequency of Data Collection:** monthly

**Responsibility for Data Collection:** CPCU is responsible for collecting data from the SPs or CTDs

**DATA REPORTING**

**Data reporting tool:** Results from each service provider/CTD report are input by the CPCU into the PMIS.

**Data Aggregation:** Data is aggregated by county and by TIMP type

**Data Reporting:** Indicator values are reported in the quarterly reports by the CPCU to the NPCU and by the NPCU in its quarterly and annual reports.
## Indicator #37

**Name of Indicator:** Percentage of CIG/VMG micro-grant projects successfully completed

### DESCRIPTION

#### Precise Definition:

CIG/VMG micro-grant projects: CIG and VMGs are eligible to apply for micro-grants under Window I of sub-component 1.2. Micro-projects will be identified during the PICD process.

Successfully completed: Implementation of micro-projects will be monitored using the Community Scorecard (CSC) tool (see Annex D.6). Using this tool, a micro-project that is successful is a micro-project for which the scores given by community members averaged across all criteria is equal to or greater than 50%. An average score below 50% does not indicate a successful micro-project.

This indicator relates to indicator #6 ‘Number of CIG/VMG micro-project grants approved’. Divide the number successfully completed by the number approved and multiply by 100 to derive the percentage of CIG/VMG micro-grants successfully completed.

*This indicator measures the number of approved CIG and VMG micro-grants that are successfully completed.*

**Unit of Measure:** percentage of CIG/VMG micro-project grants

#### Disaggregated by:

- County, ward
- Organisation and membership type
- Micro-project type:
  - Implementation of CSA TIMPs
  - Livelihood diversification
  - Mainstreaming nutrition

**Justification & Management Utility:** This indicator is a PAD results framework indicator. It tracks progress in successful completion of micro-projects.

### PLAN FOR DATA COLLECTION

**Data Sources:** Self-reported by CIGs and VMGs using community score card method

**Data Collection Method:** Community scorecard method (see Annex D.6)
**Indicator #3**

**Name of Indicator:** Percentage of CIG/VMG micro-grant projects successfully completed

**DESCRIPTION**

**Precise Definition:**

CIGs: CIG stands for Common Interest Group. CIGs are community based organisations (CBOs), such as farmer groups, women groups, youth groups, and self-help groups (SHGs) that have a mutual interest in participating in the project. Each CIG will have a membership of 20-30 beneficiaries who pay annual membership fee, and each CIG will be organised in relation to a value chain prioritized in the PICD process.

VMGs: VMG stands for Vulnerable and Marginalized Groups. VMGs can be formed of youth, Indigenous People (IP), elderly women and men, widows/orphans, disabled, recovering substance abusers, and people living with HIV/AIDS. In the PICD process, special barazas will be held for vulnerable and marginalized members of the communities identified during the PICD process. Existing VMGs may be identified and new VMGs may be formed that target either a single category or multiple categories of VMGs to achieve the threshold of 20-30 members.

CIGs and VMGs are eligible to apply for two types of community investment grant: (i) service fee funds that will be used by the beneficiaries to pay for the contracted extension services offered by their service providers, and (ii) community-led CSA micro-projects.

**Beneficiaries reached:** This indicator counts the total number of individual members of CIGs and VMGs that are implementing or have implemented either type of community investment grant.

**Gender disaggregation:** Numbers of members of CIGs and VMGs should be reported by gender (male, female).

This indicator aligns to the WB Corporate Results Indicator “number of farmers reached with agricultural / animal husbandry assets or services”
This indicator measures the total number of members of CIGs and VMG that are implementing or have implemented community investment grants.

**Unit of Measure:** individuals

**Disaggregated by:**
- County, ward
- Gender (male, female)
- Organisation and membership type
- Community investment grant type:
  - Service fee grants
  - Micro-project grants

**Justification & Management Utility:** This indicator aligns with the PAD results framework indicators “Direct project beneficiaries (number), of which female (percentage)”.

### PLAN FOR DATA COLLECTION

**Data Sources:** Producer Group Tracker

**Data Collection Method:** See Annex D.5 for detailed description of data collection and analysis procedures

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** Local extension officer; Service provider

### DATA REPORTING

**Data Reporting tool:** Data from the producer organisation development tracker is entered into the PMIS.

**Data Aggregation:** This indicator will be aggregated together with indicators #34 and #37 to calculate the total number of direct project beneficiaries reached with agricultural / animal husbandry assets or services. See Workstream 7 on data aggregation.

**Data Reporting:** The indicator value is reported in the quarterly progress reports by the CPCU and NPCU.
### Indicator #39

**Name of Indicator:** Percentage of county matching grant projects successfully completed

**DESCRIPTION**

**Precise Definition:**

**County sub-projects:** 17 counties in semi-arid and medium-to-high potential areas and 7 counties in the NEDI region are eligible for county sub-grants under sub-component investment Window II that support to county governments to implement CSA interventions that provide public goods and are ward-specific or span several wards.

**Successfully completed:** Contracts for implementation of county sub-grants will specify the deliverables and outputs of each grant. A sub-grant is considered to have been successfully completed when all the deliverables and outputs in the contract have been achieved. In addition, the Sub-grant Common Performance Measurement Framework specifies indicators that must be reported by each sub-grantee, including beneficiary satisfaction. A sub-grant is considered successfully completed when beneficiary satisfaction of at least 50% is achieved.

*This indicator measures the number of county sub-project grants that have been successfully completed as measured by the common performance framework for county sub-projects.*

**Unit of Measure:** Number of sub-projects.

**Disaggregated by:**

- County;
- Sub-project type (categories to be confirmed by Working Group on M&E): Sustainable landscape management; Water management; Animal health; Crop-livestock integration; Energy; Market access; Livelihood diversification.

**Justification & Management Utility:** This indicator is a PAD results framework indicator and tracks successful completion of county sub-grant investment projects.

**PLAN FOR DATA COLLECTION**

**Data Sources:** County sub-grantee

**Data Collection Method:** County sub-grant common performance measurement framework *(Annex D.7)*

**Frequency of Data Collection:** Ongoing, according to reporting schedules agreed in each sub-grant contract.

**Responsibility for Data Collection:** CPCU
### DATA REPORTING

**Data Reporting tool:** CPCU enters common performance measurement indicator values in PMIS.

**Data Aggregation:** PMIS aggregates % of successful sub-grants across counties.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCUs and NPCU.

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### Indicator #40

**Name of Indicator:** Infrastructure rehabilitated or constructed by county sub-grants

#### DESCRIPTION

**Precise Definition:**

County sub-projects: 17 counties in semi-arid and medium-to-high potential areas and 7 counties in the NEDI region are eligible for county sub-grants under sub-component investment Window II that support to county governments to implement CSA interventions that provide public goods and are ward-specific or span several wards. The indicator measures only the physical outputs from county sub-projects that have been deemed to have been completed.

Infrastructure rehabilitated or newly constructed: Infrastructure is considered to have been completed only when a field inspection by the CPCU confirms that this is the case.

*This indicator measures the amount of infrastructure rehabilitated or constructed through county sub-project grants.*

**Unit of Measure:** multiple units.

**Disaggregated by:**

- County;
- Infrastructure type (unit) (categories and units to be confirmed by Working Group on M&E, e.g. Roads (km); Irrigation channels (km); Water storage facilities (m$^3$ capacity); etc)

**Justification & Management Utility:** This is an indicator of tangible outputs from county sub-grant projects.

#### PLAN FOR DATA COLLECTION

**Data Sources:** County sub-grantee
**Data Collection Method:** County sub-grant common performance measurement framework (Annex C.4)

**Frequency of Data Collection:** Ongoing, according to reporting schedules agreed in each sub-grant contract.

**Responsibility for Data Collection:** CPCU

**DATA REPORTING**

**Data Reporting tool:** CPCU enters common performance measurement indicator values in PMIS.

**Data Aggregation:** Sub-types of infrastructure reported by each county are then aggregated in the PMIS across counties.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by CPCUs and NPCU.

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**Indicator #41**

**Name of Indicator:** Number of direct project beneficiaries in county sub-grant projects reached with agricultural / animal husbandry assets or services

**DESCRIPTION**

**Precise Definition:**

**County sub-projects:** 17 counties in semi-arid and medium-to-high potential areas and 7 counties in the NEDI region are eligible for county sub-grants under sub-component investment Window II that support to county governments to implement CSA interventions that provide public goods and are ward-specific or span several wards. The indicator measures only the physical outputs from county sub-projects that have been deemed to have been completed.

**Beneficiaries reached:** Where goods or services are provided to individual and identifiable rural households, the method used for indicator #31 should be used. Where public goods are provided and individual beneficiaries are difficult to identify, the villages or wards likely to benefit from the sub-project shall be identified, and census or other official population data used to estimate numbers of beneficiaries.

**Gender disaggregation:** Numbers of beneficiaries of county sub-grants should be reported by gender (male, female) based on the gender composition of CIG/VMG member households or of households recorded in population census data for the administrative area identified as benefitting from the sub-grant.

**Beneficiaries who are or are not CIG/VMG members:** The beneficiaries of county sub-grant projects may be project-registered CIG/VMG members or non-members. Reports submitted by county sub-grant implementation
agencies should estimate the number of men and women sub-grant beneficiaries who are and are not project-registered CIG/VMG members. This will aid in calculating total numbers of beneficiaries reached when overlaps with other indicators are considered.

*This indicator measures the total number of beneficiaries of county sub-grants that have completed the construction phase.*

**Unit of Measure:** individuals

**Disaggregated by:**
- County, ward
- Gender (male, female)

**Justification & Management Utility:** This indicator aligns with the PAD results framework indicators “Direct project beneficiaries (number), of which female (percentage)”.

**PLAN FOR DATA COLLECTION**

**Data Sources:** County sub-grantee

**Data Collection Method:** County sub-grant common performance measurement framework (Annex D.7)

**Frequency of Data Collection:** Ongoing, according to reporting schedules agreed in each sub-grant contract.

**Responsibility for Data Collection:** CPCU

**DATA REPORTING**

**Data Reporting tool:** NPCU enters beneficiary numbers in PMIS.

**Data Aggregation:** Sub-indicators for # of beneficiaries etc are then aggregated together with indicators #31 and #37 for reporting aggregate numbers of beneficiaries. See Workstream 7 on data aggregation.

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCU and NPCU.
### Indicator #42

**Name of Indicator:** Client-days of training provided on TIMPS through county sub-grant projects

**DESCRIPTION**

**Precise Definition:**

TIMPs: TIMP stands for Technologies, Innovations and Management Practices. Sub-component 2.1 of the project will compile an inventory of and prioritize TIMPs. Any TIMP listed as validated, recommended or prioritized in that inventory can be considered a TIMP promoted by the project. Applied and adaptive research will further add to the list of project-recommended TIMPs. Once respective training material has been issued, these TIMPs are also considered to be a TIMP promoted by the project.

**Person days of training:** Participation of an individual in a full day of training is recorded as one-person day of training. Thus, a 2-day course for 10 people would be recorded as 20-person days of training.

**TIMP training provided by county sub-grant projects:** Training on TIMPs is one of the main activities conducted by service providers and CTDs implementing community investment micro-projects. That training was covered in indicator #28. This indicator counts only TIMP training provided to men or women as part of approved county sub-grant projects under investment Window II. Other TIMP training provided as part of micro-projects or PPP sub-grants are reported elsewhere.

**Disaggregation by gender:** Reports submitted by county sub-grant implementation agencies should report the number of women and men receiving training and the respective number of training days.

**Trainees who are or are not CIG/VMG members:** The trainees reported may be project-registered CIG/VMG members or non-members. Reports submitted by county sub-grant implementation agencies should indicate the number of men and women trained who are and are not project-registered CIG/VMG members. This will aid in calculating total numbers of beneficiaries reached when overlaps with other indicators are considered.

*This indicator measures the number of person days of training provided to men and women as part of county sub-grant projects.*

**Unit of Measure:** person days

**Disaggregated by:**

- County, ward
- Gender (male, female)
- TIMP type

**Justification & Management Utility:** This indicator is a PAD results framework indicator. It tracks progress in promotion of TIMPs to direct project beneficiaries.
### PLAN FOR DATA COLLECTION

<table>
<thead>
<tr>
<th><strong>Data Sources:</strong></th>
<th>Self-reported by county sub-project implementation agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Collection Method:</strong></td>
<td>County sub-grant common performance measurement framework (Annex D.7)</td>
</tr>
<tr>
<td><strong>Frequency of Data Collection:</strong></td>
<td>Ongoing, according to reporting schedules agreed in each sub-grant contract.</td>
</tr>
<tr>
<td><strong>Responsibility for Data Collection:</strong></td>
<td>CPCU</td>
</tr>
</tbody>
</table>

### DATA REPORTING

<table>
<thead>
<tr>
<th><strong>Data Reporting tool:</strong></th>
<th>CPCU enters beneficiary numbers in PMIS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Aggregation:</strong></td>
<td>Indicators for number of TIMP client days of training in county sub-grants are then aggregated together with indicators #28 and #38 for reporting aggregate numbers of TIMP client days of training.</td>
</tr>
<tr>
<td><strong>Data Reporting:</strong></td>
<td>Aggregated indicator values are reported in quarterly project report by NPCU.</td>
</tr>
</tbody>
</table>

### Indicator #43

<table>
<thead>
<tr>
<th><strong>Name of Indicator:</strong></th>
<th>Percentage of PPP matching grant projects successfully completed</th>
</tr>
</thead>
</table>

#### DESCRIPTION

**Precise Definition:**

PPP matching grants: Investment Window III in sub-component 1.2 supports productive alliances through PPP investments. These are sub-grants to private companies or producer organisations to strengthen market linkages. There are two types: matching grants to private firms and matching grants to producer organisations. Criteria for each are set out in the KCSAP Matching Grants Manual.

Successfully completed: Contracts for implementation of PPP sub-grants will specify the deliverables and outputs of each grant. A sub-grant is considered to have been successfully completed when all the deliverables and outputs in the contract have been achieved. In addition, the Sub-grant Common Performance Measurement Framework specifies indicators that must be reported by each sub-grantee, including beneficiary satisfaction. A sub-grant is considered successfully completed when beneficiary satisfaction of at least 50% is achieved.

This indicator relates to indicator #20, the number of PPP matching grants approved. The number that are successfully completed divided by the number approved * 100 is the percentage successfully completed.
This indicator measures the percentage of all approved PPP matching grants that have been successfully completed as measured by the common performance framework for sub-projects.

**Unit of Measure:** Number of sub-projects.

**Disaggregated by:**
- County;
- Grantee type:
- Private firm
- Producer organisation
- Sub-project type (categories to be confirmed by Working Group on M&E): Sustainable landscape management; Water management; Animal health; Crop-livestock integration; Energy; Market access; Livelihood diversification.

**Justification & Management Utility:** This indicator is a PAD results framework indicator and tracks successful completion of PPP sub-grant investment projects.

**PLAN FOR DATA COLLECTION**

**Data Sources:** PPP sub-grantee

**Data Collection Method:** Sub-grant common performance measurement framework (Annex D.7)

**Frequency of Data Collection:** Ongoing, according to reporting schedules agreed in each sub-grant contract.

**Responsibility for Data Collection:** CPCU or NPCU, depending on whether the grant is for activities in single counties or multiple counties.

**DATA REPORTING**

**Data Reporting tool:** CPCU or NPCU enters common performance measurement indicator values in PMIS.

**Data Aggregation:** Indicator values are summed across all approved PPP grants

**Data Reporting:** Aggregated indicator values are reported in quarterly project reports by CPCUs and/or NPCU.

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Trainees who are or are not CIG/VMG members: The trainees reported may be project-registered CIG/VMG members or non-members. Reports submitted by PPP sub-grant implementation agencies should indicate the number of trainees that are registered CIG/VMG members or non-members. This information is then entered into the PMIS system. This will allow trainees to be disaggregated by CIG/VMG membership and non-membership.
**Indicator #44**

**Name of Indicator:** Number of direct project beneficiaries in PPP matching grant sub-projects reached with agricultural / animal husbandry assets or services

**DESCRIPTION**

**Precise Definition:**

**PPP matching grants:** Investment Window III in sub-component 1.2 supports productive alliances through PPP investments. These are sub-grants to private companies or producer organisations to strengthen market linkages. There are two types: matching grants to private firms and matching grants to producer organisations. Criteria for each are set out in the KCSAP Matching Grants Manual.

**Beneficiaries reached:** Where goods or services are provided to CIG/VMG members, the method used for indicator #31 should be used. Where non-CIG members are included among beneficiaries, the PPP grantee should use supplier databases, undertake a survey or use other available data sources to estimate the number of beneficiaries and their gender composition.

**Gender disaggregation:** Numbers of beneficiaries of PPP sub-grants should be reported by gender (male, female) based on the gender composition of CIG/VMG member households, or for non-CIG members data from supplier databases or other data sources.

**Beneficiaries who are or are not CIG/VMG members:** The beneficiaries of PPP sub-grant projects may be project-registered CIG/VMG members or non-members. Reports submitted by PPP sub-grantee should estimate the number of men and women sub-grant beneficiaries who are and are not project-registered CIG/VMG members. This will aid in calculating total numbers of beneficiaries reached when overlaps with other indicators are considered.

*This indicator measures the total number of beneficiaries of PPP sub-grants that have completed the construction phase.*

**Unit of Measure:** individuals

**Disaggregated by:**

- County, ward
- Gender (male, female)

**Justification & Management Utility:** This indicator aligns with the PAD results framework indicators “Direct project beneficiaries (number), of which female (percentage)”.

**PLAN FOR DATA COLLECTION**

**Data Sources:** PPP sub-grantee
### Indicator #44

**Name of Indicator:** Number of direct project beneficiaries in PPP matching grants projects

**Description**

**Precise Definition:**
PPP matching grants: Investment Window III in sub-component 1.2 supports productive alliances through PPP investments. These are sub-grants to private companies or producer organisations to strengthen market linkages. There are two types: matching grants to private firms and matching grants to producer organisations. Criteria for each are set out in the KCSAP Matching Grants Manual.

**Beneficiaries reached:** Where goods or services are provided to CIG/VMG members, the method used for indicator #31 should be used. Where non-CIG members are included among beneficiaries, the PPP grantee should use supplier databases, undertake a survey or use other available data sources to estimate the number of beneficiaries and their gender composition.

**Gender disaggregation:** Numbers of beneficiaries of PPP sub-grants should be reported by gender (male, female) based on the gender composition of CIG/VMG member households, or for non-CIG members data from supplier databases or other data sources.

**Beneficiaries who are or are not CIG/VMG members:** The beneficiaries of PPP sub-grant projects may be project-registered CIG/VMG members or non-members. Reports submitted by PPP sub-grantee should estimate the number of men and women sub-grant beneficiaries who are and are not project-registered CIG/VMG members. This will aid in calculating total numbers of beneficiaries reached when overlaps with other indicators are considered.

**This indicator measures the total number of beneficiaries of PPP sub-grants that have completed the construction phase.**

**Unit of Measure:** individuals

**Disaggregated by:**
- County, ward
- Gender (male, female)

**Justification & Management Utility:**
This indicator aligns with the PAD results framework indicators "Direct project beneficiaries (number), of which female (percentage)."

**Plan for Data Collection**

**Data Sources:** PPP sub-grantee

**Data Collection Method:** Sub-grant common performance measurement framework (Annex D.7)

**Frequency of Data Collection:** Ongoing, according to reporting schedules agreed in each sub-grant contract.

**Responsibility for Data Collection:** CPCU or NPCU

**Data Reporting**

**Data Reporting Tool:** CPCU or NPCU enters beneficiary numbers in PMIS.

**Data Aggregation:** Sub-indicators for # of beneficiaries etc are then aggregated together with indicators #31 and #34 for reporting aggregate numbers of beneficiaries. See Workstream 7 on data aggregation.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by CPCUs or NPCU.

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### Indicator #45

**Name of Indicator:** Client-days of training provided on TIMPS through PPP sub-grant projects

**Description**

**Precise Definition:**
TIMPs: TIMP stands for Technologies, Innovations and Management Practices. Sub-component 2.1 of the project will compile an inventory of and prioritize TIMPs. Any TIMP listed as validated, recommended or prioritized in that inventory can be considered a TIMP promoted by the project. Applied and adaptive research will further add to the list of project-recommended TIMPs. Once respective training material has been issued, these TIMPs are also considered to be a TIMP promoted by the project.

**Person days of training:** Participation of an individual in a full day of training is recorded as one-person day of training. Thus, a 2-day course for 10 people would be recorded as 20-person days of training.

**TIMP training provided by PPP sub-grant projects:** Training on TIMPs is one of the main activities conducted by service providers and CTDs implementing community investment micro-projects. That training was covered in indicator #28. This indicator counts only TIMP training provided to men or women as part of approved PPP sub-grant projects under investment Window III. Other TIMP training provided as part of micro-projects or county sub-grants are reported elsewhere.

**Disaggregation by gender:** Reports submitted by PPP sub-grant implementation agencies should report the number of women and men receiving training and the respective number of training days.
### Indicator #46

**Name of Indicator:** Number of NARS institutions using the CSA M&E system

**DESCRIPTION**

**Precise Definition:**

**NARS institutions:** NARS stands for national agricultural research system. It includes KALRO and all its subsidiary research institutes, as well as other national and regional research institutes related to agriculture, livestock, aquaculture and natural resources management.

**CSA M&E system:** KCSAP sub-component 2.1 proposes to establish and maintain for CSA TIMPs related to crops, livestock, aquaculture and NRM research, and the development of seed systems. Sustained innovation for CSA TIMPs by NARS institutes depends on feedback from the practical application of TIMPs. The CSA M&E system is designed to provide this feedback. Therefore, monitoring the use of the CSA M&E system by NARS institutes is an indicator of improved capacity to realise the potential of innovation.

*This indicator measures the number of NARS institutions using the CSA M&E system established in project component 2.1.*

**Unit of Measure:** Number of institutions

**Disaggregated by:**

- Agriculture
- Livestock
- Aquaculture
- Natural resources management

**Justification & Management Utility:** Monitoring use of the CSA M&E system is an indicator of its relevance to NARS institutions and the improvement of institutions for providing feedback on CSA TIMPs

**PLAN FOR DATA COLLECTION**

**Data Sources:** The CSA M&E system.

**Data Collection Method:** The CSA M&E system should be designed to record the number of users per reporting period and their institutional affiliation. This shall be reported in quarterly progress reports submitted by the contracted institution.

**Frequency of Data Collection:** Quarterly
Indicator #46

Name of Indicator: Number of NARS institutions using the CSA M&E system

DESCRIPTION

Precise Definition:

NARS institutions: NARS stands for national agricultural research system. It includes KALRO and all its subsidiary research institutes, as well as other national and regional research institutes related to agriculture, livestock, aquaculture and natural resources management.

CSA M&E system: KCSAP sub-component 2.1 proposes to establish and maintain for CSA TIMPs related to crops, livestock, aquaculture and NRM research, and the development of seed systems. Sustained innovation for CSA TIMPs by NARS institutes depends on feedback from the practical application of TIMPs. The CSA M&E system is designed to provide this feedback. Therefore, monitoring the use of the CSA M&E system by NARS institutes is an indicator of improved capacity to realise the potential of innovation.

This indicator measures the number of NARS institutions using the CSA M&E system established in project component 2.1.

Unit of Measure: Number of institutions

Disaggregated by:

- Agriculture
- Livestock
- Aquaculture
- Natural resources management

Justification & Management Utility:

Monitoring use of the CSA M&E system is an indicator of its relevance to NARS institutions and the improvement of institutions for providing feedback on CSA TIMPs.

PLAN FOR DATA COLLECTION

Responsibility for Data Collection: The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by the contracted institution.

DATA REPORTING

Data reporting tool: NPCU component 2 leader shall enter the number of institutions in the PMIS

Data Aggregation: -

Data Reporting: Indicator values are reported in quarterly and annual project report by NPCU.

Indicator #47

Name of Indicator: Number of CSA TIMPs formally released

DESCRIPTION

Precise Definition:

TIMPs: TIMP stands for Technologies, Innovations and Management Practices. Sub-component 2.1 of the project will compile an inventory of and prioritize TIMPs. Any TIMP listed as validated and recommended in that inventory can be considered a TIMP promoted by the project. Applied and adaptive research will further add to the list of project-recommended TIMPs and be updated in the inventory of CSA TIMPs.

Formally released: Any TIMP meeting these two criteria are considered to have been formally released: (a) the TIMP is listed in the inventory of TIMPs as validated and recommended; (b) training material has been published on the TIMP.

This indicator measures the number of CSA TIMPs recommended in the CSA TIMP inventory for which training materials have been published.

Unit of Measure: Number of CSA TIMPs

Disaggregated by:

- TIMP sub-categories (to be confirmed by M&E Working Group – see Annex F), e.g. Agriculture; Livestock; Aquaculture; Natural resources management

Justification & Management Utility: The release of TIMPs is a pre-condition for promotion and adoption of TIMPs. Monitoring the release of TIMPs is a key indicator of the performance of sub-component 2.1 in enabling the adoption of CSA TIMPs by project beneficiaries.
**Data Sources:** Quarterly progress reports by contracted institutions in sub-component 2.1

**Data Collection Method:** All NARS and research consortia that are lead contractees in sub-component 2.1 should submit quarterly progress reports to the NPCU component 2 leader. See Annex D.8 for research contract quarterly reporting format.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the number of institutions in the PMIS

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions. Assuming that only lead contractees submit these reports, there should be no double-counting of TIMPs but this may need to be confirmed when contract contents are known.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

**Indicator #48**

**Name of Indicator:** Number of research fairs held

**DESCRIPTION**

**Precise Definition:**

*Research fairs:* Sub-component 2.1 proposes to convene biannual research fora and symposia for research teams. ‘Research fair’ refers to both of these types of activity together. These activities promote inter- and intra-institutional information, communication and technology exchange/transfer, and thus strengthen NARS institutions.

*This indicator measures the number of research fora and symposia convened for research teams under sub-component 2.1.*

**Unit of Measure:** Number of research fairs

**Disaggregated by:**

-
**Justification & Management Utility:** The number of research fairs held is an indicator of the project contribution to strengthening intra- and inter-institutional collaboration within the NARS.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Quarterly progress reports by contracted institutions in sub-component 2.1

**Data Collection Method:** All NARS and research consortia that are lead contractees in sub-component 2.1 should submit quarterly progress reports to the NPCU component 2 leader. See Annex D.8 for research contract quarterly reporting format.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by lead contract institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the number of research fairs in the PMIS

**Data Aggregation:** Where multiple NARS institutions participate in the same research fair, NPCU shall take care to avoid double counting of research fairs. Indicator values shall be summed across quarterly reports from contracted institutions.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

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**Indicator #49**

**Name of Indicator:** Number of research & innovation platforms for inter- and intra-institutional information, exchange/transfer

**DESCRIPTION**

**Precise Definition:**

Research and innovation platforms: Sub-component 2.1 proposes to develop electronic platforms for information sharing within and beyond the NARS. These platforms promote inter- and intra-institutional information, communication and technology exchange/transfer, and thus strengthen NARS institutions.

*This indicator measures the number of electronic platforms for information sharing that are established under sub-component 2.1.*
**Unit of Measure:** Number of electronic platforms

**Disaggregated by:**
- 

**Justification & Management Utility:** The number of electronic platforms is an indicator of the project contribution to strengthening intra- and inter-institutional collaboration within the NARS and the communication of research information to other stakeholders.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Quarterly progress reports by contracted institutions in sub-component 2.1

**Data Collection Method:** All NARS and research consortia that are lead contractees in sub-component 2.1 should submit quarterly progress reports to the NPCU component 2 leader. See Annex D.8 for research contract quarterly reporting format.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by lead contract institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the number of research fairs in the PMIS

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions. Once a platform has been reported as established, in subsequent reports, its status shall be marked as ‘continuing’, so that only new platforms are counted and reported in subsequent periods.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

**Indicator #50**

**Name of Indicator:** Number of Training of Trainer (ToT) person days delivered

**DESCRIPTION**

**Precise Definition:**

Training of Trainer (ToT): Sub-component 2.1 proposes that KALRO and other NARS institutions provide ToT workshops for participating CTDs and external service providers in order to build the capacities of CTDs and
SPs to promote TIMPs.

Person days of training: Participation of an individual in a full day of training is recorded as one person day of training. Thus, a 2-day course for 10 people would be recorded as 20 person days of training.

This indicator measures the number of person days of training of trainers provided by KALRO and other NARS institutions to CTDs and SPs on CSA TIMPs under sub-component 2.1.

Unit of Measure: Number of person days

Disaggregated by:

- TIMP sub-categories (to be confirmed by M&E Working Group): Agriculture; Livestock; Aquaculture; Natural resources management

Justification & Management Utility: The number of person days of training provided to CTDs and SPs on CSA TIMPs is an indicator of the transfer of knowledge from the NARS to those who directly promote adoption by project beneficiaries.

PLAN FOR DATA COLLECTION

Data Sources: Quarterly progress reports by contracted institutions in sub-component 2.1

Data Collection Method: All NARS institutions and research consortia that are lead contractees in sub-component 2.1 should submit quarterly progress reports to the NPCU component 2 leader. See Annex D.8 for research contract quarterly reporting format.

Frequency of Data Collection: Quarterly

Responsibility for Data Collection: The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by lead contract institutions.

DATA REPORTING

Data reporting tool: NPCU component 2 leader shall enter the number of ToT person days in the PMIS

Data Aggregation: Indicator values shall be summed across quarterly reports from contracted institutions. Where multiple NARS institutions participate in the same ToT, NPCU shall take care to avoid double counting of person days of training.

Data Reporting: Indicator values are reported in quarterly and annual project report by NPCU.
**Indicator #51**

**Name of Indicator:** Number of trainers trained through Training of Trainers (ToT) activities

**DESCRIPTION**

**Precise Definition:**

*Training of Trainer (ToT):* Sub-component 2.1 proposes that KALRO and other NARS institutions provide ToT workshops for participating CTDs and external service providers in order to build the capacities of CTDs and SPs to promote TIMPs.

*Number of trainers trained:* The number of trainers trained is the number of people completing a ToT course.

*This indicator measures the number of people trained to be a trainer in CSA TIMPs through training of trainers provided by KALRO and other NARS institutions to CTDs and SPs on CSA TIMPs under sub-component 2.1.*

**Unit of Measure:** Number of people

**Disaggregated by:**

- TIMP sub-categories (to be confirmed by M&E Working Group): Agriculture; Livestock; Aquaculture; Natural resources management

**Justification & Management Utility:** The number of people trained is an indicator of human resources for dissemination of CSA techniques

**PLAN FOR DATA COLLECTION**

**Data Sources:** Quarterly progress reports by contracted institutions in sub-component 2.1

**Data Collection Method:** All NARS institutions and research consortia that are lead contractees in sub-component 2.1 should submit quarterly progress reports to the NPCU component 2 leader. See Annex D.8 for research contract quarterly reporting format.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by lead contract institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the number of people completing ToT courses in the PMIS
**Indicator #51**

**Name of Indicator:** Number of trainers trained through Training of Trainers (ToT) activities

**DESCRIPTION**

**Precise Definition:**

Training of Trainer (ToT): Sub-component 2.1 proposes that KALRO and other NARS institutions provide ToT workshops for participating CTDs and external service providers in order to build the capacities of CTDs and SPs to promote TIMPs. These workshops are ToT courses.

Formally released TIMPs: Any TIMP meeting these two criteria are considered to have been formally released: (a) the TIMP is listed in the inventory of TIMPs as validated and recommended; (b) training material has been published on the TIMP. The number of formally released TIMPs is reported in indicator #40.

The percentage of formally released TIMPs that are promoted in ToT courses is calculated as the number of TIMPs promoted in ToT courses divided by the total number of formally released TIMPs multiplied by 100.

**This indicator measures the percentage of formally released TIMPs that are promoted in ToT courses provided by KALRO and other NARS institutions to CTDs and SPs on CSA TIMPs under sub-component 2.1.**

**Unit of Measure:** percent

**Disaggregated by:**

- 

**Justification & Management Utility:** The percent of TIMPs that are actually delivered through ToTs is an indicator of the transfer of knowledge from the NARS to those who directly promote adoption by project beneficiaries.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Quarterly progress reports by contracted institutions in sub-component 2.1

**Data Collection Method:** All NARS institutions and research consortia that are lead contractees in sub-component 2.1 should submit quarterly progress reports to the NPCU component 2 leader. See
Annex D.8 for research contract quarterly reporting format. Indicator #40 reports the total number of formally released TIMPs. The NPCU is responsible for calculating the percentage based on quarterly reports of TIMPs promoted in ToTs and the total number of formally released TIMPs.

**Frequency of Data Collection:** Quarterly

**Responsible for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by lead contract institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the percentage of TIMPs in the PMIS.

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions. Where multiple NARS institutions participate in the same ToT, NPCU shall take care to avoid double counting of TIMPs included in ToT workshops.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

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**Indicator #53**

**Name of Indicator:** Percentage of planned procurement of equipment (in $US) completed

**DESCRIPTION**

**Precise Definition:**

**Planned procurement:** Sub-component 2.3 proposes to refurbish and equip NARS research institutions in line with meeting CSA objectives. This will be done by conducting an inventory of research institutions that require refurbishment and equipping, prioritizing investments in line with meeting the CSA objectives and developing a procurement plan. The total value (US$) of planned procurements for refurbishment and equipment will be stated in the procurement plan.

**Actual procurement:** Actual procurements (US$) for refurbishment and equipment will be reported in the quarterly financial statements from contracted institutions.

The percentage of planned procurement completed is calculated as the value of actual procurement divided by the total planned procurement multiplied by 100.

*This indicator measures the percentage of planned refurbishment and equipment procurement for NARS institutions that is actually procured under sub-component 2.3.*
**Unit of Measure:** percent

**Disaggregated by:**

- 

**Justification & Management Utility:** The percentage of planned procurements that are actually procured is an indicator of progress in achieving target outputs for improving the technical capacities of NARS institutions.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Quarterly financial reports by contracted institutions in sub-component 2.3.

**Data Collection Method:** All NARS institutions contracted to make procurements in sub-component 2.3 should submit quarterly financial reports to the NPCU component 2 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly financial reports submitted by contracted institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the percentage of planned procurement actually procured in the PMIS

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

**Indicator #54**

**Name of Indicator:** Number of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed

**DESCRIPTION**

**Precise Definition:**

Sub-component 2.3 will identify research institutes’ training needs for CSA and develop a training plan, and will identify county agricultural extension staff CSA training needs and develop a training plan for short-term
technical training. Completion of training activities that are identified in these two plans are tracked by this indicator.

**Post-graduate degrees completed:** Post-graduate degrees are PhD and MSc degrees. Completion is indicated by receipt by the student of a degree certificate. Only degrees awarded after PhD and MSc courses that are identified in the NARS training plan are counted. Each PhD or MSc degree awarded is counted as one post-graduate course completed.

**Short course technical training:** Short courses are any non-degree technical training course lasting one week or more. Only training courses that are identified in the training plan for short-term technical training for county agricultural extension staff are counted. The indicator counts the number of individuals completing courses, not person days of training.

*This indicator measures the number of individuals completing post-graduate and short-term technical training courses that are identified in NARS and county agricultural extension staff training plans developed under sub-component 2.3.*

**Unit of Measure:** number of individuals completing training courses

**Disaggregated by:**

- Type of training course:
  - PhD
  - MSc
  - Short-term technical training course
- Gender of trainee (male, female)

**Justification & Management Utility:** This indicator is a PAD results framework indicator, and an indicator of progress in improving the technical capacities of NARS institutions.

**PLAN FOR DATA COLLECTION**

**Data Sources:** For training completed by NARS institutions, quarterly progress reports by institutions receiving finance for training courses in sub-component 2.3. See Annex D.8 for research contract quarterly reporting format. For training completed by county agricultural extension staff, quarterly progress reports by institutions contracted to provide the training.

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 2 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this
DATA REPORTING

Data reporting tool: NPCU component 2 leader shall enter the number of training courses completed in the PMIS.

Data Aggregation: Indicator values shall be summed across quarterly reports from contracted institutions.

Data Reporting: Indicator values are reported in quarterly and annual project report by NPCU.

Indicator #55

Name of Indicator: Number of collaborative research grant projects completed (adaptive, applied)

DESCRIPTION

Precise Definition:

Sub-component 2.1 will finance research consortia to implement adaptive and applied research. Adaptive research will be conducted to validate identified TIMPs for the value chains identified at the County level. Applied research will contribute to development of new TIMPs on the basis of priority constraints or gaps identified at county level. The topics and research consortia will be identified through a process described in the Collaborative Research Grants Manual.

Research grant projects completed: Each research grant project will have its own objectives, outputs and implementation timeline. Contracts will be based on the deliverables, outputs and timeline set out in successful research proposals. Completion of a research grant project will be indicated by all contracted deliverables and outputs being reported as completed in that grant project’s progress report.

This indicator measures the number of applied and adaptive research grant projects that complete the delivery of deliverables set out in research grant contracts.

Unit of Measure: number of research grant projects completed

Disaggregated by:

- 

Justification & Management Utility: This indicator tracks progress in delivering planned outputs in Sub-component 2.1.
### PLAN FOR DATA COLLECTION

**Data Sources:** Quarterly progress reports by lead NARS institutions receiving applied or adaptive research grants in sub-component 2.1. See Annex D.8 for research contract quarterly reporting format.

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 2 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.

### DATA REPORTING

**Data reporting tool:** NPCU component 2 leader shall enter the number of projects completed in the PMIS.

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

<table>
<thead>
<tr>
<th>Indicator #56</th>
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</thead>
</table>

**Name of Indicator:** Number of participating in on-farm TIMP trials, share of which female

### DESCRIPTION

**Precise Definition:**

Sub-component 2.1 will finance research consortia to implement adaptive and applied research on CSA TIMPs. Both types of research may involve on-farm TIMP trials.

**On-farm TIMP trials:** On-farm trials are research trials or experiments conducted on cropland or livestock owned and managed by farmers or (agro-)pastoralists. Research conducted on farms or livestock owned and managed by research institutes (e.g. on-station trials) are not considered.

**Number of farmers:** On-farm trials are conducted on cropland or livestock that may be managed either exclusively by males or females or jointly by males and females in a household. The indicator counts the number of individual household members directly participating in the design, implementation or evaluation of a trial or experiment.

**Share of which female:** The share of female on-farm trial participants is calculated as the number of female
participants divided by the total number of male and female participants multiplied by 100.

This indicator measures the number of individuals (by gender) directly participating in the design, implementation or evaluation of a trial or experiment conducted on-farm as part of applied or adaptive research grant projects.

### PLAN FOR DATA COLLECTION

**Data Sources:** Quarterly progress reports by lead NARS institutions receiving applied or adaptive research grants in sub-component 2.1. See Annex D.8 for research contract quarterly reporting format.

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 2 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.

### DATA REPORTING

**Data reporting tool:** NPCU component 2 leader shall enter the number of projects completed in the PMIS.

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions. Men and women previously reported as participating in a trial are marked as ‘continuing’ and only new men and women participants are counted in subsequent reports.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

### Indicator #57

**Name of Indicator:** Number of TIMPs tested through on-farm trials, share of which validated
DESCRIPTION

Precise Definition:

Sub-component 2.1 will finance research consortia to implement adaptive and applied research on CSA TIMPs. Both types of research may involve on-farm TIMP trials.

TIMPs tested: TIMP stands for Technologies, Innovations and Management Practices. Specific definition of TIMP will be given in the TIMP inventory and prioritization reports. It is likely that most on-farm trials involve one TIMP, but some trials may involve testing combinations of TIMPs.

On-farm TIMP trials: On-farm trials are research trials or experiments conducted on cropland or livestock owned and managed by farmers or (agro-) pastoralists. Research conducted on farms or livestock owned and managed by research institutes (e.g. on-station trials) are not considered.

Validated: A TIMP is validated when research results confirm that a TIMP is suitable to be recommended for promotion.

Share of which validated: The share of TIMPs validated is calculated as the number of TIMPs validated divided by the total number of TIMPs tested through on-farm trials.

This indicator measures the number of TIMPs tested and the proportion validated through testing in trials or experiment conducted on-farm as part of applied or adaptive research grant projects.

Unit of Measure: number of TIMPs (percentage validated)

Disaggregated by:

- TIMP type (to be elaborated by M&E working group)

Justification & Management Utility: This indicator is a PAD results framework indicator. It tracks progress in identifying TIMPs that are suitable for promotion to project beneficiaries.

PLAN FOR DATA COLLECTION

Data Sources: Quarterly progress reports by lead NARS institutions receiving applied or adaptive research grants in sub-component 2.1. See Annex D.8 for research contract quarterly reporting format.

Data Collection Method: Quarterly progress reports are submitted to the NPCU component 2 leader.

Frequency of Data Collection: Quarterly

Responsibility for Data Collection: The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.
DATA REPORTING

**Data reporting tool:** NPCU component 2 leader shall enter the number of projects completed in the PMIS.

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions. TIMPs previously reported as validated are marked as ‘continuing’ and only newly validated TIMPs are counted in subsequent reports.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

**Indicator #58**

**Name of Indicator:** Number of ToT manuals on TIMPs produced and published

**DESCRIPTION**

**Precise Definition:**

The number of TIMPs promoted in ToT activities is measured by other indicators. This indicator measures the number of ToT manuals published.

**Training of Trainer (ToT) manuals:** Sub-component 2.1 proposes that KALRO and other NARS institutions will develop training materials to use in delivering ToT workshops for participating CTDs and external service providers in order to build the capacities of CTDs and SPs to promote TIMPs. A ToT manual is any manual that is written for use by trainers (not by farmers) that describes TIMPs and that explains how to support farmers to adopt the TIMPs described.

**TIMPs:** TIMP stands for Technologies, Innovations and Management Practices. A TIMP is only considered formally released when it is included in the project inventory of TIMPs and training materials have been published.

*This indicator measures the number of manuals for use by trainers that describe and explain how trainers can support farmers in adopting TIMPs.*

**Unit of Measure:** number of ToT manuals

**Disaggregated by:**

- Topical issues
**Justification & Management Utility:** This indicator tracks the conversion of NARS research results into communication materials for use in training trainers who will directly promote TIMPs to project beneficiaries.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Quarterly progress reports by contracted NARS institutions. See Annex D.8 for research contract quarterly reporting format.

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 2 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the number of ToT manuals in the PMIS.

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions. Manuals previously reported as published are marked as ‘continuing’ and only newly published manuals are counted in subsequent reports.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

**Indicator #59**

**Name of Indicator:** Number of curricula developed and piloted

**DESCRIPTION**

**Precise Definition:**

**Curricula:** Sub-component 2.3 will support agriculture and related programmes in learning institutions to revise curricula to include CSA components and to pilot the delivery of these revised curricula. These curricula will be part of agriculture-related diploma, certificate, bachelor’s, master’s and doctoral courses. The project will also develop and deliver short-term technical training modules. Each curriculum and each technical training module is counted as a curriculum.

**Curricula piloted:** These curricula are piloted when learning institutions implement the revised curricula on a trial basis or when short-term technical training modules are delivered in training courses.
This indicator measures the curricula that are revised to include CSA components and that are being used on a trial basis and short-term technical training modules that are being delivered in training courses.

**Unit of Measure:** number of curricula

**Disaggregated by:**
- Diploma / certificate level curricula
- Bachelors’ degree curricula
- Post-graduate degree curricula
- Short-term technical training modules

**Justification & Management Utility:** This indicator tracks the integration of CSA into learning institutions’ curricula.

**PLAN FOR DATA COLLECTION**

**Data Sources:** For curricula revised and piloted by higher education institutions (including NARS) quarterly progress reports by institutions receiving support in sub-component 2.3. See Annex D.8 for research contract quarterly reporting format. For short-term technical training modules, quarterly progress reports by institutions contracted to develop and provide the training.

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 2 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the number of curricula piloted in the PMIS.

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions. Curricula previously reported as piloted are marked as ‘continuing’ and only newly curricula are counted in subsequent reports.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.
### Indicator #60

**Name of Indicator:** Volume of CSA inputs produced by crop seed, breed stock and fingerlings producers supported by the project

**DESCRIPTION**

**Precise Definition:**

*Seed*: includes foundation seed, early generation seed, certified and quality assured seed, OPV seed, parent breeding livestock, and fish fingerlings.

Producers supported by the project: seed producers receiving financial or technical assistance from the project.

*This indicator measures the volume (metric tonne, head) of CSA seed / breed / fingerling inputs produced by seed producers supported by the project.*

**Unit of Measure:** Seed: metric tonne; fingerlings: number; livestock parent stocks: head

**Disaggregated by:**

- Seed: foundation seed, early generation, certified, quality assured and OPV seed; also disaggregated by crop type
- Livestock disaggregated by livestock type
- Fingerlings, disaggregated by fish type

**Justification & Management Utility:** This indicator is a PAD results framework indicator and tracks the supply of improved CSA inputs.

**PLAN FOR DATA COLLECTION**

**Data Sources:**

Foundation and early generation seed in tonnes per variety: KALRO produce list with name of basic seed variety multiplied through support of project, and kg seed produced by KALRO or their partners per seed variety.

Certified and quality assured seed: KEPHIS reports quantified seed volume per variety certified at production units supported by the project.

Livestock: KALRO reports total head of livestock parent stock produced in breeding programmes by livestock type.

Fish: KMFRI/KeFS reports fish fingerling production supplying the 24 counties by variety.
**Indicator #60**

**Name of Indicator:** Volume of CSA inputs produced by crop seed, breed stock and fingerlings producers supported by the project

**DESCRIPTION**

**Precise Definition:**

Seed: includes foundation seed, early generation seed, certified and quality assured seed, OPV seed, parent breeding livestock, and fish fingerlings.

Producers supported by the project: seed producers receiving financial or technical assistance from the project.

This indicator measures the volume (metric tonne, head) of CSA seed / breed / fingerling inputs produced by seed producers supported by the project.

**Unit of Measure:**
- Seed: metric tonne
- Fingerlings: number
- Livestock parent stocks: head

**Disaggregated by:**
- Seed: foundation seed, early generation, certified, quality assured and OPV seed also disaggregated by crop type
- Livestock: disaggregated by livestock type
- Fingerlings: disaggregated by fish type

**Justification & Management Utility:**

This indicator is a PAD results framework indicator and tracks the supply of improved CSA inputs.

**PLAN FOR DATA COLLECTION**

**Data Sources:**
- Foundation and early generation seed in tonnes per variety: KALRO produce list with name of basic seed variety multiplied through support of project, and kg seed produced by KALRO or their partners per seed variety.
- Certified and quality assured seed: KEPHIS reports quantified seed volume per variety certified at production units supported by the project.
- Livestock: KALRO reports total head of livestock parent stock produced in breeding programmes by livestock type.
- Fish: KMFRI/KeFS reports fish fingerling production supplying the 24 counties by variety.

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 2 leader. Only values produced in the current reporting period should be counted.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the indicator values in the PMIS.

**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions. See further details in Workstream 7 on data aggregation.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

**Indicator #61**

**Name of Indicator:** Number of community-based seed producers registered / certified

**DESCRIPTION**

**Precise Definition:**

Under Sub-component 2.2, the research team/CPCUs in collaboration with KEPHIS will support the establishment of a seed certification mechanism and guidelines for the seed production for OPVs. Support will also be provided to community-based organisations to produce, store, clean, package and sell/distribute seed and to implement the certification system.

Community-based seed producers: Seed CIGs and individual seed producers (e.g. farmers, SMEs) that produce and distribute seed.

Registered / certified: Community-based seed producers that are certified by or registered under the certification or registration system established by the project.

This indicator measures the number of community-based seed producing units that are certified according to the requirements of the certification mechanism established through the project.

**Unit of Measure:** number of seed producing units

**Disaggregated by:**
- County, ward
- Seed type
- Producer type (e.g. CIG, PO, SME)

**Justification & Management Utility:** This indicator tracks the number of seed producing units that meet mandatory requirements under the certification or registration scheme

### PLAN FOR DATA COLLECTION

**Data Sources:** Certification documents

**Data Collection Method:** Visual confirmation of certification documents by NPCU Component 2 leader.

**Frequency of Data Collection:** Ongoing

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for confirming the certification documents.

### DATA REPORTING

**Data reporting tool:** NPCU component 2 leader shall enter the number of certified seed producing units in the PMIS.

**Data Aggregation:** Aggregated across counties

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

**Indicator #62**

**Name of Indicator:** Number of seed CIGs established

**DESCRIPTION**

**Precise Definition:**

CIGs: CIG stands for Common Interest Group. CIGs are community based organisations (CBOs), such as farmer groups, women groups, youth groups, and self-help groups (SHGs) that have a mutual interest in participating in the project. Each CIG will have a membership of 20-30 beneficiaries who pay annual membership fee, and each CIG will be organised in relation to a value chain prioritized in the PICD process.

Seed CIGs: These are CIGs that are involved in producing plant seed, livestock parent breeds or aquaculture seeds/fingerlings.
Established: All CIGs and VMGs will develop by-laws/rules/constitution/MoU and register with the department for social protection within one month of their formation. Seed CIGs will be established jointly with CTDs, KALRO/other NARS team members and SPs. Establishment of other types of CIGs is measured through indicator #5. The sub-categories for CIGs will ensure that there is no double-counting of seed CIGs established as part of the PICD process (sub-component 1.1) and CIGs established through the activities of sub-component 2.2.

This indicator measures **the number of CIGs engaged in seed/parent stock production that have been established and registered with the department of social services.**

**Unit of Measure:** Number

**Disaggregated by:**

- County and ward;
- Organisation type and membership type (M&E Working Group to confirm);
- Seed type
  - Plant seed
  - Livestock seed
  - Aquaculture seed

**Justification & Management Utility:** This indicator tracks progress in forming CBOs to produce and distribute seed.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Certificate of registration

**Data Collection Method:** The CPCU should verify by visual inspection (a copy of) the certificate of registration for each seed CIG. A unique identifier code shall then be allocated in the PMIS for each registered CIG.

**Frequency of Data Collection:** Ongoing, during project implementation

**Responsibility for Data Collection:** CPCU is responsible for verifying certificates of registration

**DATA REPORTING**

**Data Reporting tool:** CPCU enters indicator values in PMIS.

**Data Aggregation:** Indicator #57 is summed with indicator #60 for reporting of PAD indicator “number of seed production units receiving technical assistance/support”. PMIS coding shall avoid
double counting of Component 1 CIGs and Component 2 seed CIGs (see ToRs for M&E Working Group in Annex F)

Data Reporting: Aggregated indicator values are reported in quarterly project report by CPCUs and NPCU.

Indicator #63

Name of Indicator: Number of seed CIGs receiving technical assistance via the project

DESCRIPTION

Precise Definition:

Seed CIGs: These are CIGs that are involved in producing plant seed, livestock parent breeds or aquaculture seeds/fingerlings.

Technical assistance from the project: Component 2.2 will provide support for seed CIGs through various mechanisms, including:

- Credit-guarantee scheme
- Technical Assistance for seed retailers and community-based organizations, including business development grants
- Revolving fund for community-based seed production units.

Institutional arrangements for operation of these support mechanisms have not yet been defined. Grants or service fees provided through Component 1 are not counted in this indicator.

This indicator measures the number of seed CIGs that benefit from one or more support mechanisms under Component 2.2.

Unit of Measure: Number of seed CIGs

Disaggregated by:

- County, ward;
- Organisation and membership type (to be confirmed by M&E Working Group);
- Technical assistance mechanism:
  - Credit guarantee
  - Technical assistance, including business development grants
  - Revolving fund.
**Justification & Management Utility:** This indicator is a PAD results framework indicator, and tracks progress in delivering project outputs.

**PLAN FOR DATA COLLECTION**

**Data Sources:** The agencies responsible for deciding on credit guarantee, TA and revolving fund access should report the unique ID of each seed CIG supported.

**Data Collection Method:** NPCU component 2 leader shall obtain data on the approval of credit guarantee/TA/revolving fund/micro-project grants from decision-making bodies’ meeting minutes.

**Frequency of Data Collection:** Ongoing, after each decision-making body meetings.

**Responsibility for Data Collection:** NPCU component 2 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU component 2 leader enters indicator values in PMIS. The entry of approval data shall be linked with the unique identifier code of each registered seed CIG in order to disaggregate total numbers of grants by different organisation types and shall also record the type of assistance approved (i.e. credit guarantee, TA, revolving funds).

**Data Aggregation:** PMIS aggregates data entry by geographic location, month, type of organisation, type of support mechanism.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by CPCUs and NPCU.

**Indicator #64**

**Name of Indicator:** Number of seed production units receiving technical assistance / support from the project

**DESCRIPTION**

**Precise Definition:**

- **Seed production units:** These are SMEs that produce plant seed, livestock parent stocks or aquaculture fingerlings. They do not include seed CIGs, which are accounted for separately under indicator #62.

- **Technical assistance / support from the project:** Component 2.2 will provide support for seed production units through various mechanisms, including:
  - Credit-guarantee scheme
- Technical Assistance for seed retailers and community-based organizations, including business development grants
- Revolving fund for community-based seed production units.

Institutional arrangements for operation of these support mechanisms have not yet been defined.

*This indicator measures the number of seed production units (other than seed CIGs) that benefit from one or more support mechanisms under Component 2.2.*

**Unit of Measure:** Number of companies

**Disaggregated by:**

- County, ward;
- Technical assistance mechanism:
  - Credit guarantee
  - Technical assistance, including business development grants
  - Revolving fund.
- Seed product type:
  - Plant seed
  - Livestock breeds
  - Aquaculture breeds

**Justification & Management Utility:** This indicator is a PAD results framework indicator, and tracks progress in delivering project outputs in sub-component 2.2.

### PLAN FOR DATA COLLECTION

**Data Sources:** The agencies responsible for deciding on credit guarantee, TA and revolving fund access should report the unique ID of each seed producing enterprise supported.

**Data Collection Method:** NPCU component 2 leader shall obtain data on the approval of credit guarantee/TA/revolving funds micro-project grants from decision-making bodies’ meeting minutes.

**Frequency of Data Collection:** Ongoing, after each decision-making body meetings.

**Responsibility for Data Collection:** NPCU component 2 leader

**DATA REPORTING**
Data Reporting tool: NPCU component 2 leader enters indicator values in PMIS. The entry of approval data shall be linked with the unique identifier code of each seed production enterprise in order to disaggregate total numbers of grants by different organisation types and shall also record the type of assistance approved (i.e. credit guarantee, TA, revolving funds)

Data Aggregation: PMIS aggregates data entry by geographic location, month and type of support mechanism. Double-counting is avoided by using a unique identifier for each seed production enterprise, so that if the same enterprise receives more than one form of support, this is counted as one enterprise.

Data Reporting: Aggregated indicator values are reported in quarterly project report by CPCUs and NPCU.

Indicator #65

Name of Indicator: Number of meetings held to support registration / certification of community-based seed producers

DESCRIPTION

Precise Definition:

Sub-component 2.2 will support CBOs (e.g. CIGs, POs, SMEs) to produce, multiply and distribute high value, improved and OPV seed varieties. At present there is no registration or certification system for community-produced seed.

Registration / certification system: Sub-component 2.2 proposes to establish a certification system for community-produced seed and/or seed producers.

Meetings held: The number of individual meetings or workshops convened with a sole or primary focus on advocating for or developing a certification or registration scheme for community-based seed producers. A multi-day meeting counts as one meeting.

This indicator measures the number of meetings held to advocate for or develop a certification or registration scheme for community-based seed producers and/or community-produced seed.

Unit of Measure: number of meetings held

Disaggregated by:

-
**Justification & Management Utility:** This indicator tracks activities of the project to establish a legal basis for community-based seed producers as a key institutional innovation to be sustained beyond the project lifetime.

**PLAN FOR DATA COLLECTION**

<table>
<thead>
<tr>
<th>Data Sources:</th>
<th>Meeting minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Collection Method:</strong></td>
<td>Meeting minutes provided by contacted institutions to NPCU Component 2 leader.</td>
</tr>
<tr>
<td><strong>Frequency of Data Collection:</strong></td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Responsibility for Data Collection:</strong></td>
<td>The NPCU component 2 leader is responsible for obtaining meeting minutes from contracted institutions</td>
</tr>
</tbody>
</table>

**DATA REPORTING**

| Data reporting tool: | NPCU component 2 leader enter the number of meetings held in the PMIS. |
| Data Aggregation: | - |
| **Data Reporting:** | Indicator values are reported in quarterly and annual project report by NPCU. |

**Indicator #66**

| Name of Indicator: | Number of meetings held to support NARS germplasm licensing and transfer policy |

**DESCRIPTION**

**Precise Definition:**

NARS germplasm licensing and transfer policy: Inadequate institutional, policy and legal provisions for handling seed issues has resulted in limited access to early generation seed by seed producers. Sub-component 2.2 will support KALRO and KEPHIS to collaborate in developing mechanisms for institutionalizing licensing and germplasm transfer agreements by identifying institutions/stakeholders engaged in development of varieties, livestock breeding stock and fish fingerlings; jointly establishing a policy on licensing; and development of contract documents to be used for transfer of germplasm for further multiplication and up-scaling.

Meetings held: The number of individual meetings or workshops convened with a sole or primary focus on advocating for or developing NARS germplasm licensing and transfer policy. A multi-day meeting counts as one
This indicator measures the number of meetings held to advocate for or develop NARS germplasm licensing or transfer policy.

Unit of Measure: Number of meetings

Disaggregated by: -

Justification & Management Utility: This indicator tracks activities to establish a legal basis for germplasm licensing and transfer by NARS as a key institutional innovation to be sustained beyond the project lifetime.

PLAN FOR DATA COLLECTION

Data Sources: Meeting minutes

Data Collection Method: Meeting minutes provided by contacted institutions to NPCU Component 2 leader.

Frequency of Data Collection: Ongoing

Responsibility for Data Collection: The NPCU component 2 leader is responsible for obtaining meeting minutes from contracted institutions

DATA REPORTING

Data reporting tool: NPCU component 2 leader shall enter the number of meetings held in the PMIS.

Data Aggregation: -

Data Reporting: Indicator values are reported in quarterly and annual project report by NPCU.

Indicator #67

Name of Indicator: Number of meetings held to support development of seed quality assurance standards

DESCRIPTION

Precise Definition:
Seed quality assurance standards: Since seeds are traded within the Eastern Africa region, there is need to harmonize the seeds laws and regulations within the EAC to be consistent with EAC protocols. This would ensure the seeds meet international standards to promote regional and international trade. Sub-component 2.2 will collaborate with conjunction with KEPHIS, KEBS and the Kenya Stud Book, constitute a task force to develop quality standards for CSA crop varieties and livestock/fish breeds.

Meetings held: The number of individual meetings or workshops convened with a sole or primary focus on advocating for or developing seed quality assurance standards. A multi-day meeting counts as one meeting.

*This indicator measures the number of meetings or workshops held focusing on advocating for or developing seed quality assurance standards.*

**Unit of Measure:** Number of meetings held

**Disaggregated by:**
- Plant seed
- Livestock breed
- Aquaculture breed

**Justification & Management Utility:** This indicator tracks the activities conducted to establish a legal basis for seed quality as a key institutional innovation to be sustained beyond the project lifetime.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Meeting minutes

**Data Collection Method:** Meeting minutes provided by contacted institutions to NPCU Component 2 leader.

**Frequency of Data Collection:** Ongoing

**Responsibility for Data Collection:** The NPCU component 2 leader is responsible for obtaining meeting minutes from contracted institutions

**DATA REPORTING**

**Data reporting tool:** NPCU component 2 leader shall enter the number of meetings held in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.
## Indicator #68

### Name of Indicator:
Number of meetings held to support establishment of a Public-Private Dialogue on seeds

### DESCRIPTION

#### Precise Definition:

Public-Private Dialogue on seeds: An inadequate legal framework inhibits development of Kenya’s seed sector. To address this, the project will appoint a group of experts drawn from KALRO and NARIs to constitute a task force that will organize a forum for stakeholders to engage in public-private dialogue platform (PPD) and conduct workshops to advocate for necessary reforms in the seed sector.

**Number of meetings**: Each meeting of the task force and each PPD meeting or workshop held is counted as one meeting.

*This indicator measures the number of meetings or workshops held to support establishment of the PPD.*

### Unit of Measure:
Number of meetings

### Disaggregated by:

- 

### Justification & Management Utility:
This indicator monitors the number of PPD meetings held as an indicator of project support to stakeholder dialogue to improve the legal framework for seeds.

### PLAN FOR DATA COLLECTION

**Data Sources:** Meeting or workshop minutes

**Data Collection Method:** Meeting or workshop minutes will be submitted after each event by the agency contracted to convene the PPD to the NPCU Component 2 leader.

**Frequency of Data Collection:** Ongoing

**Responsibility for Data Collection:** The NPCU component 2 leader.

### DATA REPORTING

**Data reporting tool:** NPCU component 2 leader shall enter the number of meetings held in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.
**Indicator #69**

**Name of Indicator:** % of targeted beneficiaries satisfied with access to seed, fingerling and breed stock inputs (disaggregated by gender)

**DESCRIPTION**

**Precise Definition:**

*Beneficiaries:* The primary group of direct project beneficiaries targeted by KCSAP are members of CIGs and VMGs. They will be primary target customer group for input stockists.

*Satisfaction:* The expressed contentment on a predefined scale about the availability and accessibility of seed, fingerling and breed stock.

*This indicator measures the proportion of sampled target beneficiaries who express satisfaction with access to seed, fingerling and breed stock inputs.***

**Unit of Measure:** percentage

**Disaggregated by:**

- County
- Gender
- Seed type

**Justification & Management Utility:** Reflects target beneficiary satisfaction, feedback can be used to improve project services

**PLAN FOR DATA COLLECTION**

**Data Sources:** Quarterly survey to verify beneficiary household data

**Data Collection Method:** CIG/VMG member household survey

**Calculation:** Ratio of number of beneficiaries satisfied with (n) to the total number of beneficiaries surveyed (N): \( \frac{n}{N} \times 100 \)

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** CPCU & CTAC

**DATA REPORTING**
### Indicator #69

**Name of Indicator:** % of targeted beneficiaries satisfied with access to seed, fingerling and breed stock inputs (disaggregated by gender)

**DESCRIPTION**

**Precise Definition:**

- **Beneficiaries:** The primary group of direct project beneficiaries targeted by KCSAP are members of CIGs and VMGs. They will be primary target customer group for input stockists.
- **Satisfaction:** The expressed contentment on a predefined scale about the availability and accessibility of seed, fingerling and breed stock.

This indicator measures the proportion of sampled target beneficiaries who express satisfaction with access to seed, fingerling and breed stock inputs.

**Unit of Measure:** percentage

**Disaggregated by:**
- County
- Gender
- Seed type

**Justification & Management Utility:**
Reflects target beneficiary satisfaction, feedback can be used to improve project services.

**PLAN FOR DATA COLLECTION**

**Data Sources:**
Quarterly survey to verify beneficiary household data

**Data Collection Method:**
CIG/VMG member household survey

**Calculation:**
\[ \text{Ratio of number of beneficiaries satisfied with } (n) \text{ to the total number of beneficiaries surveyed } (N) = \frac{n}{N} \times 100 \]

**Frequency of Data Collection:**
Quarterly

**Responsibility for Data Collection:**
CPCU & CTAC

---

### Indicator #70

**Name of Indicator:** # of wards where priority CSA seeds (crop varieties, livestock breed, fingerlings) promoted as part of the CIAP are predominantly accessible by farmers, pastoralists and fish farmers.

**DESCRIPTION**

**Precise Definition:**

- **"Priority CSA seed"** refers to those crop varieties, livestock breeds, or fish fingerlings selected as part of the ward-specific CIAP; priority CSA seeds can differ in number and type across wards;
- **"predominantly accessible"** means (i) an observed stocking of the priority CSA crop seed variety by at least 60% of the local agro-dealers; (ii) at least 60% of the CIG/VMGs in a ward that are engaged in livestock production report that they know where to access CSA breeds and the distance to the source of breeding stock is acceptable; (iii) at least 60% of the CIG/VMGs in a ward that are engaged in aquaculture production report that they know where to access CSA varieties and that the distance to the fingerling source is acceptable.
- **"number of wards" -** refers to wards with CIAPs in the 24 project counties

For a ward to be included in the count, ALL priority livestock breeds/fish fingerlings AND at least 80% of the CIAP priority crop seeds have to be considered predominantly accessible according to the definition above.

**EXAMPLE**

=> Ward X has established in its CIAP the following 10 priority CSA seeds: (1) high yielding drought-tolerant maize variety "H6213" and " PAN 4M-17", (2) cassava variety "Siri", (3) Bean variety KAT-RM01 (KATRAM) (4) Cow pea "KUNDE MBOGA" (5) finger millet "Maseno 60D" (6) pasture variety "Mulato II" (7) goat breed "Galla Buck" (8) cattle breed "Boran x Friesian crosses" (9) Aquaculture - Nile Tilapia
Using the definition above, the finding is that all but one (namely, Cassava SIRI) priority CSA seed can be considered accessible.

**Conclusion:** In Ward X priority CSA seeds can be predominantly accessed - because with Cassava SIRI not being accessible still more than 80% (7 out of 8) priority crop seeds and all priority livestock breeds and fish fingerlings are accessible.

<table>
<thead>
<tr>
<th>Unit of Measure:</th>
<th>Number of wards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disaggregated by:</strong></td>
<td></td>
</tr>
<tr>
<td>- Crop seed</td>
<td></td>
</tr>
<tr>
<td>- Livestock parent stock</td>
<td></td>
</tr>
<tr>
<td>- Fish fingerlings</td>
<td></td>
</tr>
<tr>
<td><strong>Justification &amp; Management Utility:</strong></td>
<td>This is an outcome measure of project interventions supporting the seed distribution system</td>
</tr>
</tbody>
</table>

**PLAN FOR DATA COLLECTION**

**Data Sources:** Stocking information from agro-dealers, accessibility from the Producer Group Tracker (see Annex D.5)

**Data Collection Method:** survey of agro-dealers by CPCU, and PO development tracker implemented by SPs/CTDs

**Frequency of Data Collection:** baseline, mid-term and end-of project.

**Responsibility for Data Collection:** CPCU staff and SPs/CTDs under direction of component 2 leader

**DATA REPORTING**

**Data Reporting tool:** PMIS will hold all survey data

**Data Aggregation:** PMIS aggregates data entry based on IF...THEN... ELSE programming code

**Data Reporting:** data is reported at mid-term and end-of project
Indicator #71

Name of Indicator: Number of input dealers benefiting from revolving funds and credit guarantee schemes with support from the project

DESCRIPTION

Precise Definition:

The PAD describes provision by the project of credit guarantees and revolving credit funds to seed production enterprises, but the PIM describes these mechanisms as being used to support input dealers.

Input dealers: These are companies that retail agro-veterinary inputs, including seeds.

Financial support schemes: Component 2.2 will provide support to input dealers through credit-guarantee schemes and revolving credit funds.

Institutional arrangements for operation of these support mechanisms have not yet been defined.

This indicator measures the number of input dealers that benefit from one or more financial support mechanisms under Component 2.2.

Unit of Measure: Number of input dealers

Disaggregated by:

- County, ward;
- Technical assistance mechanism:
  - Credit guarantee
  - Revolving fund.

Justification & Management Utility: This indicator relates to the PAD results framework indicator “Seed production units receiving technical assistance/support”. Although the PAD identifies seed production units as beneficiaries of credit guarantee and revolving fund mechanisms, the PIM describes the mechanisms as also being used for input dealers.

PLAN FOR DATA COLLECTION

Data Sources: The agencies responsible for deciding on credit guarantee and revolving fund access should report the unique ID of each input dealer supported.

Data Collection Method: NPCU component 2 leader shall obtain data on the approval of credit guarantee/revolving funds from decision-making bodies’ meeting minutes or periodic progress reports.
**Frequency of Data Collection:** Ongoing, after each decision-making body meetings or quarterly.

**Responsibility for Data Collection:** NPCU component 2 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU component 2 leader enters indicator values in PMIS. The entry of approval data shall be linked with the unique identifier code of each input dealer in order to disaggregate total numbers of input dealers by type of assistance approved (i.e. credit guarantee, revolving funds).

**Data Aggregation:** PMIS aggregates data entry by geographic location, month and type of support mechanism. Double-counting is avoided by using a unique identifier for each input dealer, so that if the same dealer receives more than one form of support, this is counted as one company.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.

---

**Indicator #72**

**Name of Indicator:** Number of input dealers and wholesalers using mobile- or web-based platforms supported by the project

**DESCRIPTION**

**Precise Definition:**

Sub-component 2.2 will support the development of existing digital platforms and the creation of new platforms, such as fisheries mobile information network platform (M-samaki, AMIP), to strengthen linkages between seed/breed/fingerling wholesalers and input dealers.

**Input dealers:** These are companies that retail agro-veterinary inputs, including seeds.

**Wholesalers:** These are companies that wholesale agro-veterinary inputs, including seeds.

*This indicator measures the number of input dealers and wholesaler companies that use the digital platforms strengthened or established by the project under Component 2.2.*

**Unit of Measure:** Number of companies

**Disaggregated by:**

- County, ward;
- Company type
### Indicator #72

**Name of Indicator:** Number of input dealers and wholesalers using mobile- or web-based platforms supported by the project

**DESCRIPTION**

**Precise Definition:** Sub-component 2.2 will support the development of existing digital platforms and the creation of new platforms, such as fisheries mobile information network platform (M-samaki, AMIP), to strengthen linkages between seed/breed/fingerling wholesalers and input dealers.

**Input dealers:** These are companies that retail agro-veterinary inputs, including seeds.

**Wholesaler**

**Retailer.**

**Product type:**

- Plant seed
- Livestock breed
- Aquaculture fingerlings

**Justification & Management Utility:** This indicator tracks the usage by intended users of the digital platforms, as an indicator of uptake of this institutional innovation to be sustained beyond the project lifetime.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Digital platform operators.

**Data Collection Method:** Digital platform operators shall record the number of unique users of each platform in each reporting period and report it to NPCU Component 2 leader.

**Frequency of Data Collection:** Quarterly.

**Responsibility for Data Collection:** NPCU component 2 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU component 2 leader enters indicator values in PMIS.

**Data Aggregation:** PMIS aggregates data entry by geographic location, month and type of support mechanism. Double-counting is avoided by using unique identifiers for each user in each reporting period.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.

**Indicator #73**

**Name of Indicator:** Number of seed CIGs supported to develop seed sales/distribution networks

**DESCRIPTION**
Precise Definition:

Seed CIGs: These are CIGs that are involved in producing plant seed, livestock parent breeds or aquaculture seeds/fingerlings.

Technical assistance from the project: Component 2.2 will provide technical support for seed CIGs to develop seed sales / distribution networks.

*This indicator measures the number of seed CIGs that receive support to develop seed sales / distribution networks under Component 2.2.*

Unit of Measure: Number of seed CIGs

Disaggregated by:

- County, ward;
- Organisation and membership type (M&E Working Group to confirm categories):
- Seed product type:
  - Plant seed
  - Livestock breeds
  - Aquaculture seeds.

Justification & Management Utility: This indicator tracks progress in supporting seed CIGs to develop distribution networks, which is a precondition for project beneficiary access to the seeds they produce

PLAN FOR DATA COLLECTION

Data Sources: The agencies responsible for delivery of TA to develop sales / distribution networks should report on the CIGs they are working with.

Data Collection Method: TA providers submit quarterly reports to NPCU component 2 leader.

Frequency of Data Collection: Quarterly.

Responsibility for Data Collection: NPCU component 2 leader

DATA REPORTING

Data Reporting tool: NPCU component 2 leader enters indicator values in PMIS. The entry of approval data shall be linked with the unique identifier code of each registered seed CIG in order to
Precise Definition: These are CIGs that are involved in producing plant seed, livestock parent breeds or aquaculture seeds/fingerlings.

Technical assistance from the project: Component 2.2 will provide technical support for seed CIGs to develop seed sales / distribution networks.

This indicator measures the number of seed CIGs that receive support to develop seed sales / distribution networks under Component 2.2.

Unit of Measure:

Number of seed CIGs

Disaggregated by:

- County, ward;
- Organisation and membership type (M&E Working Group to confirm categories);
- Seed product type:
  - Plant seed
  - Livestock breeds
  - Aquaculture seeds.

Justification & Management Utility: This indicator tracks progress in supporting seed CIGs to develop distribution networks, which is a precondition for project beneficiary access to the seeds they produce.

PLAN FOR DATA COLLECTION

Data Sources: The agencies responsible for delivery of TA to develop sales / distribution networks should report on the CIGs they are working with.

Data Collection Method: Training/certification providers submit quarterly reports to NPCU component 2 leader.

Frequency of Data Collection: Quarterly.

Responsibility for Data Collection: NPCU component 2 leader

DATA REPORTING

Data Reporting tool: NPCU component 2 leader enters indicator values in PMIS. Certification
should lead to issuing a unique identifier to each input dealer.

**Data Aggregation:** PMIS aggregates data entry by geographic location, month. Only newly certified input dealers are reported in each reporting periods.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.

---

### Indicator #75

**Name of Indicator:** Number of revolving fund and credit guarantee schemes established

**DESCRIPTION**

**Precise Definition:**

Component 2.2 will establish credit guarantee and revolving fund schemes for seed producers and/or seed wholesalers and retailers. These schemes may be established in a decentralised way (e.g. by county, by product type) or may be centralized (e.g. national schemes, with sub-national operations).

*This indicator measures the number of credit guarantee schemes and revolving credit schemes established.*

**Unit of Measure:** Number of schemes

**Disaggregated by:**

- County, ward;
- Type of scheme:
  - Credit guarantee
  - Revolving credit schemes

**Justification & Management Utility:** This indicator tracks progress in establishing schemes, and users of these schemes are tracked in other indicators

**PLAN FOR DATA COLLECTION**

**Data Sources:** The agencies responsible for establishing these schemes should report on the numbers of schemes established.

**Data Collection Method:** Credit scheme implementation agencies submit quarterly reports to NPCU component 2 leader.
should lead to issuing a unique identifier to each input dealer.

Data Aggregation:
PMIS aggregates data entry by geographic location, month. Only newly certified input dealers are reported in each reporting period. Previously reported schemes are marked as ‘continuing’.

Data Reporting:
Aggregated indicator values are reported in quarterly project report by NPCU.

Indicator #75
Name of Indicator: Number of revolving fund and credit guarantee schemes established

DESCRIPTION
Precise Definition:
Component 2.2 will establish credit guarantee and revolving fund schemes for seed producers and/or seed wholesalers and retailers. These schemes may be established in a decentralised way (e.g. by county, by product type) or may be centralized (e.g. national schemes, with sub-national operations).

This indicator measures the number of credit guarantee schemes and revolving credit schemes established.

Unit of Measure: Number of schemes
Disaggregated by:
- County, ward
- Type of scheme:
  - Credit guarantee
  - Revolving credit schemes

Justification & Management Utility:
This indicator tracks progress in establishing schemes, and users of these schemes are tracked in other indicators.

PLAN FOR DATA COLLECTION

Data Sources:
The agencies responsible for establishing these schemes should report on the numbers of schemes established.

Data Collection Method:
Credit scheme implementation agencies submit quarterly reports to NPCU component 2 leader.

Frequency of Data Collection: Quarterly.
Responsibility for Data Collection: NPCU component 2 leader

DATA REPORTING

Data Reporting tool: NPCU component 2 leader enters indicator values in PMIS.

Data Aggregation: PMIS aggregates data entry by geographic location, month, type of scheme. Only newly established schemes are reported in each reporting period. Previously reported schemes are marked as ‘continuing’.

Data Reporting: Aggregated indicator values are reported in quarterly project report by NPCU.

Indicator #76
Name of Indicator: Number of mobile- or web-based platforms launched to link input supply chain actors

DESCRIPTION
Precise Definition:
Sub-component 2.2 will support the development of existing digital platforms and the creation of new platforms, such as fisheries mobile information network platform (M-samaki, AMIP), to strengthen linkages between seed/breed/fingerling wholesalers and input dealers.

Launched: New schemes are launched when their public user interface goes live. For existing schemes that are supported by the project, these are deemed to be launched when the project cooperation formally begins.

Use of these schemes is tracked in another indicator.
This indicator measures the number of web- or mobile-based input supply platforms that are launched with project support.

Unit of Measure: Number of platforms
Disaggregated by:
- Product type:
  - Plant seed
  - Livestock breed
### Aquaculture fingerlings

**Justification & Management Utility:** This indicator tracks the existence of digital platforms for which usage is then tracked by other indicators.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Digital platform operators.

**Data Collection Method:** Digital platform operators shall report on the status of each digital platform for which project support is received to NPCU Component 2 leader.

**Frequency of Data Collection:** Quarterly.

**Responsibility for Data Collection:** NPCU component 2 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU component 2 leader enters indicator values in PMIS.

**Data Aggregation:** PMIS aggregates data entry by month and type of seed product promoted. Previously reported platforms are recorded as ‘continuing’ in subsequent reports, so that only newly launched platforms are counted in subsequent reporting periods.

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.

### Indicator #77

**Name of Indicator:** Percentage of beneficiaries satisfied with relevance, timeliness and usefulness of advisories received (disaggregated by gender)

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.2 will support the development and delivery of integrated agro-weather and marketing advisories. These advisories will be delivered through a variety of channels, including mobile services, radio, extension agents and so on. Obtaining feedback on the advisory services received by users, including their relevance, timeliness and usefulness, is critical to continual improvement of this type of service.

Indicator #70 tracks the number of users by type of service and channel of service delivery. This indicator measures the percentage of sampled users (disaggregated by gender) who express satisfaction with the relevance, timeliness and usefulness of the advisory services received.
### Indicator # 77
**Name of Indicator:** Percentage of beneficiaries satisfied with relevance, timeliness and usefulness of advisory services received (disaggregated by gender)

**Description**

Precise Definition: Sub-component 3.2 will support the development and delivery of integrated agro-weather and marketing advisories. These advisories will be delivered through a variety of channels, including mobile services, radio, extension agents and so on. Obtaining feedback on the advisory services received by users, including their relevance, timeliness and usefulness, is critical to continual improvement of this type of service. Indicator # 70 tracks the number of users by type of service and channel of service delivery. This indicator measures the percentage of sampled users (disaggregated by gender) who express satisfaction with the relevance, timeliness and usefulness of the advisory services received.

**Justification & Management Utility:** This indicator provides feedback on the extent to which users are satisfied with the services provided by the project.

**Plan for Data Collection**

**Data Sources:** Agro-weather / market information user surveys

**Data Collection Method:** Evaluation methods depending on type of service and service delivery channel (see Section 5.4 on Special Studies)

**Frequency of Data Collection:** Mid-term and final, plus other ongoing.

**Responsibility for Data Collection:** KALRO or contracted evaluation agency

**Data Reporting**

**Data Reporting tool:** Contract survey report submitted to component 3 leader, who enters indicator values in PMIS

**Data Aggregation:** -

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.
Indicator #78

Name of Indicator: Number of users receiving integrated agro-weather information services and market information services, % of which female, incl. breakdown by type of service (e.g. agromet bulletins, agromet advisories, integrated agro-met / market advisories) and channel of service delivery (e.g. radio, SMS, extension worker etc)

DESCRIPTION

Precise Definition:

Sub-component 3.2 will support the development and delivery of integrated agro-weather and marketing advisories. These advisories will be delivered through a variety of channels, including mobile services, radio, extension agents and so on.

Agro-weather information services and market information services: These are services that provide information on weather and its interrelation with agriculture and agricultural product markets. Various service products may be provided (e.g. agromet bulletins, agromet advisories, integrated agro-met / market advisories).

User: A logic model of the provision of agro-weather information services suggests that once information is produced and disseminated, farmers may not receive information, or if they receive it they may not understand it, and even if they understand it various factors may prevent them from acting upon the information received. Users of agro-weather and market information services are defined for this indicator as people who receive agro-weather/market information services.

Service delivery channels: Agro-weather and market information may be provided through different channels (e.g. radio, SMS, extension workers etc). Different dissemination channels may require different survey methodologies to estimate user numbers.

This indicator measures the total number of recipients of agro-weather and market advisory service products.

Unit of Measure: number of individuals

Disaggregated by:

- County, ward
- Gender
- Type of service received
  - agromet bulletins, agromet advisories, integrated agro-met / market advisories
- Channel of service delivery
  - radio, SMS, extension worker etc
### Indicator #7

**Name of Indicator:** Number of users receiving integrated agro-weather information services and market information services, % of which female, incl. breakdown by type of service (e.g. agromet bulletins, agromet advisories, integrated agro-met / market advisories) and channel of service delivery (e.g. radio, SMS, extension worker etc)

**DESCRIPTION**

**Precise Definition:**
Sub-component 3.2 will support the development and delivery of integrated agro-weather and marketing advisories. These advisories will be delivered through a variety of channels, including mobile services, radio, extension agents and so on.

Agro-weather information services and market information services: These are services that provide information on weather and its interrelation with agriculture and agricultural product markets. Various service products may be provided (e.g. agromet bulletins, agromet advisories, integrated agro-met / market advisories).

User: A logic model of the provision of agro-weather information services suggests that once information is produced and disseminated, farmers may not receive information, or if they receive it they may not understand it, and even if they understand it various factors may prevent them from acting upon the information received.

Users of agro-weather and market information services are defined for this indicator as people who receive agro-weather/market information services.

Service delivery channels: Agro-weather and market information may be provided through different channels (e.g. radio, SMS, extension workers etc). Different dissemination channels may require different survey methodologies to estimate user numbers.

This indicator measures the total number of recipients of agro-weather and market advisory service products.

**Unit of Measure:** number of individuals

**Disaggregated by:**
- County, ward
- Gender
- Type of service received: agromet bulletins, agromet advisories, integrated agro-met / market advisories
- Channel of service delivery: radio, SMS, extension worker etc

**Justification & Management Utility:** This indicator provides feedback on the extent to which users are satisfied with the services provided by the project.

---

### PLAN FOR DATA COLLECTION

**Data Sources:** Agro-weather / market information user surveys

**Data Collection Method:** Evaluation methods depending on type of service and service delivery channel (see Section 5.4 on Special Studies)

**Frequency of Data Collection:** Mid-term and final, plus other ongoing.

**Responsibility for Data Collection:** KALRO or contracted evaluation agency

### DATA REPORTING

**Data Reporting tool:** Contract survey report submitted to NPCU, NPCU enters indicator values in PMIS

**Data Aggregation:** -

**Data Reporting:** Aggregated indicator values are reported in quarterly project report by NPCU.

---

### Indicator #79

**Name of Indicator:** Frameworks for data sharing in place

**DESCRIPTION**

**Precise Definition:**
Sub-component 3.2 will develop and deliver integrated agro-weather and market information services. This requires that data from various sources (including KMD, MAI MIS) are produced in agreed formats, shared and used in agreed ways (including subject to open data and confidentiality policies).

This indicator measures that the required data sharing frameworks (e.g. policies, procedures, mechanisms) are in place. The specific policies, procedures and mechanisms are to be determined during project implementation.

**Unit of Measure:** Yes, no

**Justification & Management Utility:** This indicator monitors whether institutional arrangements to be sustained beyond the project life time are in place.
PLAN FOR DATA COLLECTION

Data Sources: KALRO

Data Collection Method: Visual inspection of framework documents (e.g. policies, guidelines, MoUs) for data sharing mechanisms

Frequency of Data Collection: Ongoing

Responsibility for Data Collection: NPCU Component 3 leader

DATA REPORTING

Data Reporting tool: Indicator values are entered into PMIS

Data Aggregation: -

Data Reporting: NPCU reports indicator values in annual reports

Indicator #80

Name of Indicator: Quarterly user feedback reports published

DESCRIPTION

Precise Definition:

Sub-component 3.2 will support the development and delivery of integrated agro-weather and marketing advisories. These advisories will be delivered through a variety of channels, including mobile services, radio, extension agents and so on. Obtaining feedback on the advisory services received by users, including their relevance, timeliness and usefulness, is critical to continual improvement of this type of service. Feedback may be obtained through various means, including evaluation surveys, focus group discussions, user feedback via SMS and so on. Different methods for obtaining have different strengths and weaknesses, and should all be encouraged. Obtaining user feedback is an ongoing activity. The findings and results of user feedback activities should be reported on a quarterly basis, with contents varying depending on the feedback activities conducted in the reporting period.

The percentage of project quarters in which a report is published is calculated as the number of project quarters with a published report divided by the total number of project quarters multiplied by 100.

*This indicator measures the number of percentage of project quarters during which a report on user feedback activities is published.*
**PLAN FOR DATA COLLECTION**

**Data Sources:** Institutes contracted to provide agro-meteorology services

**Data Collection Method:** Institutes contracted to provide agro-meteorology services should report this indicator in quarterly progress reports to NPCU Component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** NPCU Component 3 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU Component 3 leader enters indicator values in the PMIS

**Data Aggregation:** -

**Data Reporting:** The indicator values are reported in the NPCU quarterly and annual project reports

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**Indicator #81**

**Name of Indicator:** Number of new and refurbished agro-, automated weather stations and hydro-meteorological facilities (by sub-type)

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.1 will support the refurbishment and creation of new agro-weather, automated weather stations
and hydro-meteorological facilities.

*This indicator measures the number of facilities of different types that are refurbished or established.*

**Unit of Measure:** Number

**Disaggregated by:**
- County, ward
- Type of facility:
  - Weather monitoring station, agro-meteorological monitoring station, hydro-meteorological monitoring station

**Justification & Management Utility:** This is a PAD results framework indicator that measures progress in improving infrastructure to support delivery of services in Components 3.2 and 3.3

**PLAN FOR DATA COLLECTION**

**Data Sources:** Institutes contracted to install agro-meteorology stations

**Data Collection Method:** Institutes contracted to install agro-meteorology stations should report this indicator in quarterly progress reports to NPCU Component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** NPCU Component 3 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU Component 3 leader enters indicator values in the PMIS

**Data Aggregation:** -

**Data Reporting:** The indicator values are reported in the NPCU quarterly and annual project reports

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**Indicator #82**

**Name of Indicator:** Number of new and refurbished agro- and and hydro-met centres (by sub-type)

**DESCRIPTION**

**Precise Definition:**
Sub-component 3.1 will support the refurbishment and creation of new agro- and hydro-meteorological centres.  

*This indicator measures the number of agro- and hydro-meteorological centres that are refurbished or established.*  

**Unit of Measure:** Number  

**Disaggregated by:**  
- County  
- Type of facility:  
  - agro-meteorological centres, hydro-meteorological centres  
-  

**Justification & Management Utility:** This indicator measures progress in improving infrastructure to support delivery of services in Components 3.2 and 3.3  

### PLAN FOR DATA COLLECTION  

**Data Sources:** Institutes contracted to refurbish or establish agro-/hydro-meteorology centres  

**Data Collection Method:** Institutes contracted to refurbish or establish agro-/hydro-meteorology centres should report this indicator in quarterly progress reports to NPCU Component 3 leader.  

**Frequency of Data Collection:** Quarterly  

**Responsibility for Data Collection:** NPCU Component 3 leader  

### DATA REPORTING  

**Data Reporting tool:** NPCU Component 3 leader enters indicator values in the PMIS  

**Data Aggregation:** -  

**Data Reporting:** The indicator values are reported in the NPCU quarterly and annual project reports
### Indicator #83

**Name of Indicator:** Number of Agromet Bulletins published

**DESCRIPTION**

**Precise Definition:**

*Agromet Bulletins:* Sub-component 3.2 will support KMD to build capacities for early warning and agromet services. Publication of Agromet Bulletins is a key indicator of this capacity.

*This indicator measures the number of Agromet Bulletins published by KMD or its subordinate agencies.*

**Unit of Measure:** Number of bulletins published

**Disaggregated by:**

- -

**Justification & Management Utility:** This indicator measures KMDs provision of agromet advisory information

**PLAN FOR DATA COLLECTION**

**Data Sources:** KMD

**Data Collection Method:** KMD should report this indicator in quarterly progress reports to NPCU Component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** NPCU Component 3 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU Component 3 leader enters indicator values in the PMIS

**Data Aggregation:** -

**Data Reporting:** The indicator values are reported in the NPCU quarterly and annual project reports
**Indicator #84**

**Name of Indicator:** Number of value chains covered in KALRO agro-weather platform

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.2 will support KALRO to expand its existing agro-weather platform to cover more counties and value chains.

*This indicator measures the number of value chains included in the KALRO agro-weather platform.*

**Unit of Measure:** Number of value chains

**Disaggregated by:**

- 

**Justification & Management Utility:** This indicator measures progress in increasing KALRO’s ability to provide an increased range of services relevant to the project counties

**PLAN FOR DATA COLLECTION**

**Data Sources:** KALRO

**Data Collection Method:** KALRO should report this indicator in quarterly progress reports to NPCU Component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** NPCU Component 3 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU Component 3 leader enters indicator values in the PMIS

**Data Aggregation:** -

**Data Reporting:** The indicator values are reported in the NPCU quarterly and annual project reports

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**Indicator #85**

**Name of Indicator:** Number of counties covered in KALRO agro-weather platform
**DESCRIPTION**

**Precise Definition:**

Sub-component 3.2 will support KALRO to expand its existing agro-weather platform to cover more counties and value chains.

*This indicator measures the number of counties served by the KALRO agro-weather platform.*

**Unit of Measure:** Number of counties

**Disaggregated by:**
- 

**Justification & Management Utility:** This indicator measures progress in increasing KALRO’s ability to provide an increased range of services relevant to the project counties

**PLAN FOR DATA COLLECTION**

**Data Sources:** KALRO

**Data Collection Method:** KALRO should report this indicator in quarterly progress reports to NPCU Component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** NPCU Component 3 leader

**DATA REPORTING**

**Data Reporting tool:** NPCU Component 3 leader enters indicator values in the PMIS

**Data Aggregation:** -

**Data Reporting:** The indicator values are reported in the NPCU quarterly and annual project reports

---

**Indicator #86**

**Name of Indicator:** Number of counties covered in MOAI MIS

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.2 will support MAI to expand the number of counties covered in its market information
This indicator measures the number of counties with market information included in the MAI MIS.

Unit of Measure: Number of counties

Disaggregated by:

- 

Justification & Management Utility: This indicator measures progress in increasing MAI’s ability to provide an increased range of services relevant to the project counties

PLAN FOR DATA COLLECTION

Data Sources: MAI agricultural market information division

Data Collection Method: MAI should report this indicator in quarterly progress reports to NPCU Component 3 leader.

Frequency of Data Collection: Quarterly

Responsibility for Data Collection: NPCU Component 3 leader

DATA REPORTING

Data Reporting tool: NPCU Component 3 leader enters indicator values in the PMIS

Data Aggregation: -

Data Reporting: The indicator values are reported in the NPCU quarterly and annual project reports

Indicator #87

Name of Indicator: Number of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed

DESCRIPTION

Precise Definition:

Sub-component 3.3 will undertake a capacity needs assessment of institutions involved in developing agro-meteorology advisory products, and identify and finance specialized training to meet capacity gaps as well as PhD and Masters degrees in the areas of climate change science and modeling, disaster risk management, agro-meteorology, computer science, information systems, agricultural statistics, and business information system. Completion of short-term training activities that are relevant to provision of agro-meteorology advisory services
and identified in the capacity needs assessment, and post-graduate training relevant to provision of agrometeorology advisory services that are financed by the project are tracked by this indicator.

Post-graduate degrees completed: Post-graduate degrees are PhD and MSc degrees. Completion is indicated by receipt by the student of a degree certificate. Only degrees awarded after PhD and MSc courses that are financed by the project are counted. Each PhD or MSc degree awarded is counted as one post-graduate course completed.

Short course technical training: Short courses are any non-degree technical training course lasting one week or more. Only training courses that are identified in the capacity needs assessment for short-term technical training for MAI, KMD, KALRO and NPCU staff are counted. The indicator counts the number of individuals completing courses, not person days of training.

This indicator measures the number of individuals completing short-term technical training courses that are identified in the capacity needs assessment and post-graduate courses financed by the project in sub-component 3.3.

Unit of Measure: number of individuals completing training courses

Disaggregated by:
- Type of training course:
  - PhD
  - MSc
  - Short-term technical training course
- Gender of trainee (male, female)

Justification & Management Utility: This indicator is a PAD results framework indicator, and an indicator of progress in improving the technical capacities of NARS institutions.

PLAN FOR DATA COLLECTION

Data Sources: For training completed by NARS institutions, quarterly progress reports by institutions receiving finance for training courses in sub-component 3.3.

Data Collection Method: Quarterly progress reports are submitted to the NPCU component 3 leader.

Frequency of Data Collection: Quarterly

Responsibility for Data Collection: The NPCU component 3 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.
and identified in the capacity needs assessment, and post-graduate training relevant to provision of agro-meteorology advisory services that are financed by the project are tracked by this indicator.

Post-graduate degrees completed: Post-graduate degrees are PhD and MSc degrees. Completion is indicated by receipt by the student of a degree certificate. Only degrees awarded after PhD and MSc courses that are financed by the project are counted. Each PhD or MSc degree awarded is counted as one post-graduate course completed.

Short course technical training: Short courses are any non-degree technical training course lasting one week or more. Only training courses that are identified in the capacity needs assessment for short-term technical training for MAI, KMD, KALRO and NPCU staff are counted. The indicator counts the number of individuals completing courses, not person days of training.

This indicator measures the number of individuals completing short-term technical training courses that are identified in the capacity needs assessment and post-graduate courses financed by the project in sub-component 3.3.

**Unit of Measure:** number of individuals completing training courses

**Disaggregated by:**
- PhD
- MSc
- Short-term technical training course
- Gender of trainee (male, female)

**Justification & Management Utility:** This indicator is a PAD results framework indicator, and an indicator of progress in improving the technical capacities of NARS institutions.

---

**Indicator #88**

**Name of Indicator:** Number of new or improved crop and livestock insurance products available on the market

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.3 will support MOAI AIU to strengthen their capacities to develop new crop and livestock insurance products. The project will not make direct financial contributions to delivering the products.

New or improved insurance products: New products are new insurance products that were not formerly offered by MOAI or by other market actors and that have been designed using knowledge products produced by the project. Improved products are existing insurance products offered by MOAI or other market actors that have been revised by drawing on knowledge products produced by the project.

Available in the market: Insurance products that can be purchased by farmers and pastoralists in the project area.

*This indicator measures the number of new or improved crop and livestock insurance products available on the market that build on knowledge products produced by the project.*

**Unit of Measure:** number of insurance products

**Disaggregated by:**
- Crop
- Livestock

**Justification & Management Utility:** This indicator monitors the achievement of the intermediate outcome for results chain 3B.
PLAN FOR DATA COLLECTION

Data Sources: MOAI AIU

Data Collection Method: Quarterly progress reports are submitted to the NPCU component 3 leader.

Frequency of Data Collection: Quarterly

Responsibility for Data Collection: The NPCU component 3 leader is responsible for collecting this data through the quarterly progress reports submitted by MOAI AIU.

DATA REPORTING

Data reporting tool: NPCU component 3 leader shall enter the number of new or improved products in the PMIS.

Data Aggregation: -

Data Reporting: Indicator values are reported in quarterly and annual project report by NPCU.

Indicator #89

Name of Indicator: Number of sensitization forums conducted by the MOAI agricultural insurance units to promote insurance

DESCRIPTION

Precise Definition:

Sub-component 3.3 will support MOAI AIU to strengthen their capacities to develop new crop and livestock insurance products. MOAI AIU will convene sensitization forums to promote agricultural insurance products.

This indicator measures the number of sensitization forums convened by MOAI AIU to promote agricultural insurance products.

Unit of Measure: number of forums

Disaggregated by:

- County

Justification & Management Utility: This indicator monitors the achievement of the immediate outcome for results chain 3B.
## PLAN FOR DATA COLLECTION

**Data Sources:** MOAI AIU

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 3 leader is responsible for collecting this data through the quarterly progress reports submitted by MAI AIU.

## DATA REPORTING

**Data reporting tool:** NPCU component 3 leader shall enter the number of new or improved products in the PMIS.

**Data Aggregation:**

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

### Indicator #90

**Name of Indicator:** Number of beneficiaries attending sensitization forums conducted by the MOAI agricultural insurance units

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.3 will support MOAI AIU to strengthen their capacities to develop new crop and livestock insurance products. MOAI AIU will convene sensitization forums to promote agricultural insurance products.

*This indicator measures the number of beneficiaries (by gender) attending sensitization forums convened by MOAI AIU to promote agricultural insurance products.*

**Unit of Measure:** number of people

**Disaggregated by:**

- Gender (male, female)

**Justification & Management Utility:** This indicator monitors the achievement of the immediate
outcome for results chain 3B.

**PLAN FOR DATA COLLECTION**

<table>
<thead>
<tr>
<th>Data Sources:</th>
<th>MOAI AIU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Collection Method:</strong></td>
<td>Quarterly progress reports are submitted to the NPCU component 3 leader.</td>
</tr>
<tr>
<td><strong>Frequency of Data Collection:</strong></td>
<td>Quarterly</td>
</tr>
<tr>
<td><strong>Responsibility for Data Collection:</strong></td>
<td>The NPCU component 3 leader is responsible for collecting this data through the quarterly progress reports submitted by MAI AIU.</td>
</tr>
</tbody>
</table>

**DATA REPORTING**

| **Data reporting tool:** | NPCU component 3 leader shall enter the number of new or improved products in the PMIS. |
| **Data Aggregation:** | - |
| **Data Reporting:** | Indicator values are reported in quarterly and annual project report by NPCU. |

**Indicator #91**

| **Name of Indicator:** | Number of homogeneous production zone maps developed |
| **DESCRIPTION** |
| **Precise Definition:** |

Sub-component 3.2 will support the production of data required for crop insurance products. For this, the Crop Insurance Unit of SDA in collaboration with KMD, KALRO, component 3 leader, County Project Coordination Unit (CPCU) and CDA will identify Unit Areas of Insurance (UAI) in the semi-arid participating counties. UAI is geographical areas of relatively homogeneous soils and agro-climatic conditions, and with similar technology and production practices as well as crop yields per acre. The UAI will partition semi-arid counties on the basis of their agro-climatic conditions and exposure to production risks.

*This indicator measures the number of UAI's for which maps are available.*

| **Unit of Measure:** | number |
| **Disaggregated by:** |
Outcome for results chain 3B.

**PLAN FOR DATA COLLECTION**

**Data Sources:** Crop Insurance Unit, SDA

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 3 leader is responsible for collecting this data through the quarterly progress reports submitted by SDA Crop Insurance Unit.

**DATA REPORTING**

**Data reporting tool:** NPCU component 3 leader shall enter the indicator values in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

**Indicator #92**

**Name of Indicator:** Number of crop cutting experiments being implemented

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.2 will support the production of data required for crop insurance products. The project will finance the Crop Cutting Experiments (CCEs) to provide data for crop insurance program in the participating semi-arid counties at the end of every cropping season.

*This indicator measures the number of number of crop cutting experiments conducted in the target project counties.*

**Unit of Measure:** number

**Disaggregated by:** County
### Justification & Management Utility
This indicator monitors the provision of information required to support delivery of the products and services in results chain 3B.

### PLAN FOR DATA COLLECTION

**Data Sources:** Agencies contracted to conduct CCEs

**Data Collection Method:** Progress reports are submitted to the NPCU component 3 leader after each CCE is completed.

**Frequency of Data Collection:** Ongoing, after each CCE

**Responsibility for Data Collection:** The NPCU component 3 leader is responsible for collecting this data through the progress reports submitted by the contracted agencies

### DATA REPORTING

**Data reporting tool:** NPCU component 3 leader shall enter the indicator values in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

### Indicator #93

**Name of Indicator:** Number of monthly forage availability updates disseminated

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.2 will support the production of data required for livestock insurance products. This will include establishment of a single industry-wide agent for the Normalized Difference Vegetation Index (NDVI) at the beginning of project implementation. NDVI provides a good indicator of pasture growth and vigor on a near real-time basis. The NDVI agent will be responsible for providing monthly updates on the seasonal evolution of forage availability.

*This indicator measures the number of monthly updates on forage availability disseminated.*
**Indicator #93**

**Name of Indicator:** Number of monthly fora availability updates disseminated

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.2 will support the digitization of historical agricultural data. The NDVI agent will be responsible for providing monthly updates on the seasonal evolution of forage availability. This indicator measures the number of monthly updates on forage availability disseminated.

**Unit of Measure:** number

**Disaggregated by:**

- Month

**Justification & Management Utility:**

This indicator monitors the provision of information required to support delivery of the products and services in results chain 3B.

**PLAN FOR DATA COLLECTION**

**Data Sources:** NDVI agent

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 3 leader. Quarterly progress reports are submitted to the NPCU component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 3 leader is responsible for collecting this data through the quarterly reports submitted by the NDVI agent.

**DATA REPORTING**

**Data reporting tool:** NPCU component 3 leader shall enter the indicator values in the PMIS.

**Data Aggregation:**

- **Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

**Indicator #94**

**Name of Indicator:** Number of counties with historical agricultural data digitized

**DESCRIPTION**

**Precise Definition:**

Sub-component 3.2 will support the digitization of historical agricultural data. This indicator measures the number of counties that have fully digitized datasets for all of the target variables.

**Unit of Measure:** number of counties

**Disaggregated by:**
**Justification & Management Utility:** This indicator monitors the provision of information required to support delivery of the products and services in results chain 3B.

### PLAN FOR DATA COLLECTION

**Data Sources:** contracted institution

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 3 leader is responsible for collecting this data through the quarterly reports submitted by the contracted institutions

### DATA REPORTING

**Data reporting tool:** NPCU component 3 leader shall enter the indicator values in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

**Indicator #95**

**Name of Indicator:** Number of post-graduate degree and short-term (PhD, MSc, short-course) technical trainings completed

### DESCRIPTION

**Precise Definition:**

Sub-component 3.3 will undertake a capacity needs assessment of institutions involved in developing crop and livestock insurance products, and identify and finance specialized training to meet capacity gaps as well as PhD and Masters degrees in relevant areas. Completion of short-term training activities that are relevant to provision of crop and livestock insurance products and identified in the capacity needs assessment, and post-graduate training relevant to development of crop and livestock insurance products that are financed by the project are tracked by this indicator.

**Post-graduate degrees completed:** Post-graduate degrees are PhD and MSc degrees. Completion is indicated by
receipt by the student of a degree certificate. Only degrees awarded after PhD and MSc courses that are financed by the project are counted. Each PhD or MSc degree awarded is counted as one post-graduate course completed.

**Short course technical training:** Short courses are any non-degree technical training course lasting one week or more. Only training courses that are identified in the capacity needs assessment for short-term technical training for MAI, KMD, KALRO and NPCU staff are counted. The indicator counts the number of individuals completing courses, not person days of training.

*This indicator measures the number of individuals completing short-term technical training courses that are identified in the capacity needs assessment and post-graduate courses financed by the project in sub-component 3.3.*

**Unit of Measure:** number of individuals completing training courses

**Disaggregated by:**
- Type of training course:
  - PhD
  - MSc
  - Short-term technical training course
- Gender of trainee (male, female)

**Justification & Management Utility:** This indicator is a PAD results framework indicator, and an indicator of progress in improving the technical capacities of NARS institutions.

**PLAN FOR DATA COLLECTION**

**Data Sources:** For training completed by NARS institutions, quarterly progress reports by institutions receiving finance for training courses in sub-component 3.3.

**Data Collection Method:** Quarterly progress reports are submitted to the NPCU component 3 leader.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU component 3 leader is responsible for collecting this data through the quarterly progress reports submitted by contracted institutions.

**DATA REPORTING**

**Data reporting tool:** NPCU component 3 leader shall enter the number of training courses completed in the PMIS.
**Data Aggregation:** Indicator values shall be summed across quarterly reports from contracted institutions and summed with indicators #46 and #78.

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

### Indicator #96

**Name of Indicator:** Satisfactory quarterly project interim financial and progress monitoring reports submitted within 45 days of end of the previous period

**DESCRIPTION**

**Precise Definition:**

The PAD requires that financial and progress monitoring reports are submitted within 45 days of the end of the previous quarter. Achievement of this requirement is an indicator of efficient and effective project management. The PAD only requires reporting of this indicator for national quarterly reports, but since these are written on the basis of CPCU quarterly reports, this indicator also tracks timely submission of county quarterly reports.

*This indicator measures the number of quarters in which both interim financial and progress monitoring reports are submitted within 45 days of the end of the reporting quarter.*

**Unit of Measure:** number of quarters

**Disaggregated by:**

- national
- county

**Justification & Management Utility:** This indicator is a PAD results framework indicator, and an indicator of efficient and effective project management.

**PLAN FOR DATA COLLECTION**

**Data Sources:** NPCU

**Data Collection Method:** Submission of county reports to the NPCU will be collected by the NPCU officer. NPSC will inform NPCU if national quarterly reports were on time and satisfactory.

**Frequency of Data Collection:** Quarterly

**Responsibility for Data Collection:** The NPCU M&E officer is responsible for collecting this
information from the NPCU reporting system and the NPSC.

**DATA REPORTING**

**Data reporting tool:** NPCU component 3 leader shall enter each quarter for which reporting is on time and satisfactory in the PMIS.

**Data Aggregation:** Indicator values shall be summed across quarters

**Data Reporting:** Indicator values are reported in quarterly and annual project report by NPCU.

---

<table>
<thead>
<tr>
<th>Indicator #97</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Indicator:</strong> Percentage achievement of targets in the PAD results framework</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

**Precise Definition:**

The PAD results framework sets out 51 results indicators with targets for each year of project implementation. This indicator monitors the achievement of each target. It measures the percentage of indicators for which targets in the reporting year have been achieved or exceeded.

**Unit of Measure:** per cent

**Disaggregated by:**

- Results framework indicator

**Justification & Management Utility:** This indicator ensures that performance in comparison to target is assessed as an aid to improving the effectiveness of project management

**PLAN FOR DATA COLLECTION**

**Data Sources:** NPCU M&E officer

**Data Collection Method:** NPCU M&E officer obtains data on target completion levels from the PMIS dashboard to

**Frequency of Data Collection:** Annually

**Responsibility for Data Collection:** The NPCU M&E officer is responsible for summarizing this information.
# DATA REPORTING

**Data reporting tool:** NPCU M&E officer enters the summary assessment in the annual report.

**Data Aggregation:** -

**Data Reporting:** Indicator values and summary assessment are reported in the annual project report by NPCU.

## Indicator #98

**Name of Indicator:** Percentage of grievances registered (at community, ward, county and national levels) related to delivery of project benefits that have been addressed

## DESCRIPTION

**Precise Definition:**

The PIM describes a grievance redress mechanism (GRM) that accepts complaints at community, ward, county and national levels. The GRM registers all complaints received and serves to ensure that all grievances are addressed. Actions taken in response to complaints are also recorded in the GRM. A grievance is considered to have been addressed when both parties to the agreement have reached a mutually acceptable solution.

Indicator #4 tracks the percentage of grievances received at community, ward and county levels that have been addressed. Other grievances may be received at national level. These are also entered into the GRM, including whether they have been addressed or not. This indicator combines the values in indicator #4 with the percentage of grievances received at national level that have been addressed.

The percentage of grievances that have been addressed is calculated as the number of grievances that have been addressed divided by the total number of grievances received.

**Unit of Measure:** percentage

**Disaggregated by:**

- Level at which grievance reported
- County, ward
- Types of grievance

**Justification & Management Utility:** This is a PAD results framework indicator and monitors the effective operation of the grievance redress mechanism.
### PLAN FOR DATA COLLECTION

**Data Sources:** GRM

**Data Collection Method:** obtaining total numbers of grievances, ongoing grievances and grievances addressed from the GRM

**Frequency of Data Collection:** Ongoing

**Responsibility for Data Collection:** The NPCU M&E officer is responsible for summarizing this information.

### DATA REPORTING

**Data reporting tool:** NPCU M&E officer enters the indicator values in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in the quarterly and annual project reports by NPCU.

---

**Indicator #99**

**Name of Indicator:** Percentage of NPCU and CPCU performance contracts in which expected results are fully linked to the project deliverables

**DESCRIPTION**

**Precise Definition:**

Most NPCU and CPCU staff will be seconded on a full-time basis from the respective level of government. It is good practice for staff performance contracts to reflect the nature of their current full-time tasks. Where staff move from other positions, their performance contracts should be revised to reflect their subsequent tasks and performance requirements. This indicator measures the percentage of full-time NPCU and CPCU staff whose performance contracts reflect the KCSAP tasks and deliverables for which they are responsible.

The percentage of staff that have performance contracts reflecting KCSAP requirements is calculated as the number of staff with performance contracts reflecting KCSAP requirements divided by the total number of full-time NPCU and CPCU staff.

**Unit of Measure:** percentage

**Disaggregated by:**
Justification & Management Utility: This indicator provides and indication of the alignment of individual staff incentives with project outcomes.

PLAN FOR DATA COLLECTION

Data Sources: NPCU, CPCU

Data Collection Method: Quarterly reports from NPCU and CPCUs

Frequency of Data Collection: quarterly

Responsibility for Data Collection: The CPCU and NPCU M&E officers are responsible for collecting this information.

DATA REPORTING

Data reporting tool: NPCU M&E officer enters the indicator values in the PMIS.

Data Aggregation: -

Data Reporting: Indicator values are reported in the quarterly and annual project reports by CPCUs and NPCUs.

Indicator #100

Name of Indicator: Percentage of PCUs that have reviewed and updated annual plans

DESCRIPTION

Precise Definition:

It is good practice for county and national PCUs to maintain, update and review their annual plans to ensure that activities are implemented and issues arising in a timely way. This indicator measures the percentage of PCUs at national and county level that conducted reviews and updates of PCU annual plans.

Unit of Measure: percentage

Disaggregated by:

- County
- 

-
### Indicator #100

**Justification & Management Utility:** This indicator monitors timely management of activities and issues arising.

**PLAN FOR DATA COLLECTION**

**Data Sources:** NPCU, CPCU

**Data Collection Method:** Input into PMIS by CPCU and NPCU M&E officers after each review and update

**Frequency of Data Collection:** Monthly

**Responsibility for Data Collection:** The CPCU and NPCU M&E officers are responsible for collecting this information.

**DATA REPORTING**

**Data reporting tool:** CPCU and NPCU M&E officers enter the indicator values in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in the monthly, quarterly and annual project reports by CPCUs and NPCUs.

---

**Indicator #101**

**Name of Indicator:** Percentage of trainings implemented as per training plan

**DESCRIPTION**

**Precise Definition:**

Training is an essential support to effective project implementation and project management. This indicator measures the percentage of planned training activities at NPCU and CPCU levels that are actually implemented (i.e. completed training activities / planned training activities *100).

**Unit of Measure:** percentage
**Disaggregated by:**
- County
- National

**Justification & Management Utility:** This indicator monitors completion of training activities.

**PLAN FOR DATA COLLECTION**

**Data Sources:** NPCU, CPCU

**Data Collection Method:** Input into PMIS by CPCU and NPCU M&E officers

**Frequency of Data Collection:** Monthly

**Responsibility for Data Collection:** The CPCU and NPCU M&E officers are responsible for collecting this information.

**DATA REPORTING**

**Data reporting tool:** CPCU and NPCU M&E officers enter the indicator values in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in the monthly, quarterly and annual project reports by CPCUs and NPCUs.

---

**Indicator #102**

**Name of Indicator:** Percentage of county annual workplan and budgets submitted on time

**DESCRIPTION**

**Precise Definition:**

CPCUs need to submit AWPBs on time in order for the national AWPB to be completed on time. This indicator measures the percentage of CPCUs that submit AWPBs on time.

**Unit of Measure:** percentage

**Disaggregated by:**
### Indicator #102

**Name of Indicator:** Percentage of county annual work plans and budgets submitted on time

**Description**

**Precise Definition:**
Timely submission of county AWPBs is essential to ensure timely implementation of the project. This indicator measures the percentage of county PCUs that submit AWPBs on time.

**Unit of Measure:** percentage

**Disaggregated by:** - County

**Justification & Management Utility:** This indicator monitors timely planning and budgeting by county PCUs

### PLAN FOR DATA COLLECTION

**Data Sources:** CPCU

**Data Collection Method:** Input into PMIS by CPCU M&E officers after completion of each AWPB event

**Frequency of Data Collection:** Monthly

**Responsibility for Data Collection:** The CPCU and NPCU M&E officers are responsible for collecting this information.

### DATA REPORTING

**Data reporting tool:** CPCU and NPCU M&E officers enter the indicator values in the PMIS.

**Data Aggregation:** -

**Data Reporting:** Indicator values are reported in the monthly, quarterly and annual project reports by CPCUs and NPCUs.

---

### Indicator #103

**Name of Indicator:** National annual work plan and budgets submitted on time

**Description**

**Precise Definition:**
Timely submission of national AWPBs is essential to ensure timely implementation of the project. This indicator measures whether the national AWPBs are submitted on time.

**Unit of Measure:** yes / no

**Disaggregated by:** -

**Justification & Management Utility:** This indicator monitors timely submission of plans and
budgets at national level

### PLAN FOR DATA COLLECTION

**Data Sources:** NPCU  

**Data Collection Method:** Input into PMIS by NPCU M&E officer after each AWPB event  

**Frequency of Data Collection:** Annual  

**Responsibility for Data Collection:** The NPCU M&E officer is responsible for collecting this information.

### DATA REPORTING

**Data reporting tool:** NPCU M&E officers enter the indicator values in the PMIS.  

**Data Aggregation:** -  

**Data Reporting:** Indicator values are reported in the annual project reports by NPCU.

---

**Indicator #104**

**Name of Indicator:** Operational PMIS in place  

**DESCRIPTION**

**Precise Definition:**  
Effective and efficient project management and M&E requires the PMIS is fully operational at both national and county levels. This indicator monitors that all components of the PMIS are fully operational at both county and national levels. The components are to be finalized in PMIS design.

**Unit of Measure:** yes/no

**Disaggregated by:**

- County  
- National

**Justification & Management Utility:** This indicator monitors the operational functionality of the PMIS to support project management.
### PLAN FOR DATA COLLECTION

**Data Sources:** NPCU, CPCU

**Data Collection Method:** Input into PMIS by CPCU and NPCU M&E officers

**Frequency of Data Collection:** Ongoing

**Responsibility for Data Collection:** The CPCU and NPCU M&E officers are responsible for collecting this information.

### DATA REPORTING

**Data reporting tool:** CPCU and NPCU M&E officers enter the indicator values in the PMIS.

**Data Aggregation:**

**Data Reporting:** Indicator values are reported in the quarterly and annual project reports by CPCUs and NPCUs.

---

**Indicator #105**

**Name of Indicator:** Number of counties implementing the project M&E manual satisfactorily

**DESCRIPTION**

**Precise Definition:**

Annex G presents a checklist of M&E performance criteria based on the requirements of this M&E manual. Performance should be assessed on an annual basis, and any gaps between requirements and actual performance should be addressed through management or M&E capacity building plans.

**Unit of Measure:** checklist

**Disaggregated by:**

- County
- National

**Justification & Management Utility:** This indicator monitors satisfactory performance of key M&E functions.
**Data Sources:** NPCU, CPCU

**Data Collection Method:** Input into PMIS by CPCU and NPCU M&E officers after annual review of M&E performance

**Frequency of Data Collection:** Annual

**Responsibility for Data Collection:** The CPCU and NPCU M&E officers are responsible for implementing the checklist in an annual review.

**DATA REPORTING**

**Data reporting tool:** CPCU and NPCU M&E officers enter the checklist results in the PMIS.

**Data Aggregation:** PMIS aggregates results across counties

**Data Reporting:** Indicator values are reported in the annual project reports by CPCUs and NPCUs.

---

**Indicator #106**

**Name of Indicator:** Grievance receipt and redress documented in PMIS

**DESCRIPTION**

**Precise Definition:**

The PIM describes a grievance redress mechanism (GRM) that accepts complaints at community, ward, county and national levels. The GRM registers all complaints received and serves to ensure that all grievances are addressed. Actions taken in response to complaints are also recorded in the GRM, and documentation is retained to demonstrate that grievances have been addressed. Once documented grievances are reported to the CPCU, they are recorded in the digital grievance documentation system, which will be part of the PMIS. All follow-up actions and the outcomes of those actions are also recorded in the PMIS.

This indicator measures that all grievances received and their redress are documented in the PMIS.

**Unit of Measure:** All grievances and their redress are documented (yes, no)

**Disaggregated by:**

- County
- National

**Justification & Management Utility:** This indicator monitors the ability of the project to efficiently
and effectively address all grievances by documenting all grievances and their redress

### PLAN FOR DATA COLLECTION

<table>
<thead>
<tr>
<th>Data Sources:</th>
<th>CPCU, NPCU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collection Method:</td>
<td>Noted in PMIS by CPCU and NPCU M&amp;E officers</td>
</tr>
<tr>
<td>Frequency of Data Collection:</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Responsibility for Data Collection:</td>
<td>The CPCU and NPCU M&amp;E officer is responsible for collecting this information.</td>
</tr>
</tbody>
</table>

### DATA REPORTING

| Data reporting tool: | CPCU and NPCU M&E officers enter the indicator values in the PMIS. |
| Data Aggregation: | - |
| Data Reporting: | Indicator values are reported in the quarterly and annual project reports by CPCU and NPCU. |
Annex D: Templates

Annex D.1 Annual Workplan and Budget (AWPB) templates

D.1.1 Planning and budgeting template

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>[YEAR] AWPB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Components, Sub components, Activities, Sub activities</strong></td>
<td><strong>Indicators/milestones</strong></td>
</tr>
<tr>
<td>Up scaling Climate-Smart Agricultural Practices</td>
<td></td>
</tr>
<tr>
<td>Sub component 1.1 Building Institutional Capacity and Strengthening Service Delivery</td>
<td></td>
</tr>
<tr>
<td>111</td>
<td></td>
</tr>
</tbody>
</table>

1

11
### Annex D.1 Annual Workplan and Budget (AWPB) templates

#### D.1.1 Planning and budgeting template

<table>
<thead>
<tr>
<th>COUNTY [YEAR] AWPB</th>
<th>Component</th>
<th>Subcomponents</th>
<th>Activities</th>
<th>Subactivities</th>
<th>Indicators/milestones</th>
<th>Source of funds</th>
<th>Budget</th>
<th>Responsibility</th>
<th>Technical support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up scaling</td>
<td>Climate-Smart Agricultural Practices</td>
<td>11</td>
<td>11.1 Building Institutional Capacity and Strengthening Service Delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11.2 Supporting Investments in Smallholder Agro-pastoral Production Systems</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.1 Supporting Investments in Smallholder Agro-pastoral Production Systems</td>
<td>121</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.2 Supporting Investments in Smallholder Agro-pastoral Production Systems</td>
<td>122</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.3 Supporting Investments in Smallholder Agro-pastoral Production Systems</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.4 Supporting Investments in Smallholder Agro-pastoral Production Systems</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Etc</td>
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<td>Etc</td>
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<tr>
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<td></td>
<td>Etc</td>
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<td>Etc</td>
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<td></td>
</tr>
</tbody>
</table>

**Q 1** | **Q 2** | **Q 3** | **Q 4** | **Comments (e.g. risks)**

*Note: The table continues with additional rows and columns.*
### D.1.2 Template for AWPB implementation monitoring for the present quarter or year

<table>
<thead>
<tr>
<th>Code</th>
<th>Activity</th>
<th>Indicator or milestone</th>
<th>Quantity targeted</th>
<th>Physical achievement For present period</th>
<th>Financial achievement for present period</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Level of implementation</td>
<td>Quantity achieved</td>
<td>% Cumulative achieved</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Level of implementation:** (i) On-going; (ii) completed, (iii) Cancelled (Explain why under comments)
Annex D.2 NPCU and CPCU Periodic Reporting Template

REPORTING UNIT: [county CPCU or NPCU]
REPORTING PERIOD: from [MM/DD/YY] to [MM/DD/YY]
SUBMISSION DATE: MM/DD/YY

1. Details of Progress Achieved During Quarter / half year / year

1.1 [In each sub-section, provide a narrative description of the activities conducted and outputs achieved. CPCU reports need only cover section 1.1]
1.2 Progress on Component 1: Upscaling Climate-smart Agricultural practices
1.3 Sub-component 1.1: Building Institutional Capacity and Strengthening Service Delivery
1.4 Sub-component 1.2: Supporting Investments in Smallholder Agro-pastoral Production Systems
1.5 Sub-component 1.3: Supporting Investments in Pastoral Production Systems
1.6 Progress on Component 2: Strengthening Climate-Smart Agricultural Research and Seed Systems
1.7 Sub-component 2.1: Supporting Climate-Smart Agricultural Research and Innovations
1.8 Sub-component 2.2: Building Competitive and Sustainable Seed Systems
1.9 Sub-component 2.3: Strengthening Technical and Institutional Capacity
1.10 Progress on Component 3: Supporting Agro-weather, Market, Climate and Advisory Services
1.11 Sub-component 3.1: Improving Agro-meteorological Forecasting and Monitoring
1.12 Sub-component 3.2: Developing Integrated Weather and Market Information System
1.13 Sub-component 3.3: Building Technical and Institutional Capacity
1.14 Progress on Component 4: Project Coordination and Management
1.15 Sub-component 4.1: Project Coordination
1.16 Sub-component 4.2: Monitoring & Evaluation and Impact Evaluation

2. Progress against plan

[a summary of % completion of AWPB for the reporting period]

3. Financial completion rates

[a summary of financial completion rates, including any cost overruns]

4. Problems encountered

[a narrative explanation of any problems encountered, how they were resolved or any outstanding problems, plans to resolve them and/or any assistance required]

5. Successes and lessons learned
[a narrative summary of any good experiences, progress made, lessons learned]

6. Performance results

[a table presenting the dashboard indicators]

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Annual target</th>
<th>Value achieved in the reporting period</th>
<th>Cumulative achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct project beneficiaries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of which, % female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of CIGs formed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of VMGs formed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of county sub-project investments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of PPP sub-project investments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Progress on contracts

[progress during the reporting period on all contracts made]

8. Monitoring and reporting

[a summary of the completion of monitoring and reporting activities during the reporting period]

9. Grievance Redress Mechanism

[a summary of grievances received, actions taken to address them, their current status, and any assistance needed]

10. Review and approvals

Reviewed and approved by:

CTAC/NTAC:

CPSC/NSPC:
## Annex D.3 CDDC development tracking template

### Section 1: Basic information on the CDDC

<table>
<thead>
<tr>
<th>Name of CDDC:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>County name :</th>
<th>Ward name:</th>
</tr>
</thead>
</table>

| CDDC code: | [a code number to be given based on county and ward] |

<table>
<thead>
<tr>
<th>GPS Coordinates:</th>
<th>Latitude (N/S):</th>
<th>Longitude (E/W):</th>
</tr>
</thead>
</table>

### Section 2: Organisational development status

<table>
<thead>
<tr>
<th>Registration status</th>
<th>Not yet registered</th>
<th>Officially registered</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date registered (DD/MM/YY)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Number of members:</th>
<th>Total:</th>
<th>Male:</th>
<th>Female:</th>
</tr>
</thead>
</table>

**Management committees established and trained:** (tick box for ‘yes’)

<table>
<thead>
<tr>
<th>Executive committee established:</th>
<th>% committee members female:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Executive committee trained:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Procurement committee:</th>
<th>% committee members female:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Procurement committee trained:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Social accountability and integrity committee established:</th>
<th>% committee members female:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Social accountability and integrity committee trained:</th>
</tr>
</thead>
</table>

### Section 3: Organisational functioning

<table>
<thead>
<tr>
<th>Number of meetings held in the last quarter:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Average % of members attending meetings in the last quarter:</th>
<th>Male:</th>
<th>Female:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>% of meetings documented in minutes in the last quarter:</th>
</tr>
</thead>
</table>

**Micro-grant process:**

<table>
<thead>
<tr>
<th>Number of micro-grant proposals submitted to sub-CTAC:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Number of micro-grants approved</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Grant management committee established:</th>
<th>% committee members female:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Grant management committee trained:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Bank account opened</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>MoU between CDDC and CPCU signed:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Number of monthly financial and progress reports submitted to the CPCU for each micro-grant in the last quarter:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Monthly financial reports in last quarter</th>
<th>Monthly progress reports in last quarter</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Grant #1</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Grant #2</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Grant #3</th>
</tr>
</thead>
</table>
## Annex D.4 CVCDC development tracking template

### Section 1: Basic information on the CVCDC

<table>
<thead>
<tr>
<th>Name of CVCDC:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>County name:</th>
<th>Value chain targeted:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wards included in membership:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CVCDC code: [a code number to be given based on county]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GPS Coordinates: Latitude (N/S):</th>
<th>Longitude (E/W):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Section 2: Organisational development status

**Registration status**
- [ ] Not yet registered
- [ ] Officially registered

**Date registered** (DD/MM/YY)

<table>
<thead>
<tr>
<th>Number of members:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total:</td>
</tr>
<tr>
<td>Male:</td>
</tr>
<tr>
<td>Female:</td>
</tr>
</tbody>
</table>

**Management committees established and trained:** (tick box for ‘yes’)

- Executive committee established: [ ]
  - % committee members female: [ ]

- Executive committee trained: [ ]

### Section 3: Organisational functioning of CVCDGs and CVCDCs

**Number of meetings held in the last quarter:**

<table>
<thead>
<tr>
<th>Average % of members attending meetings in the last quarter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male:</td>
</tr>
<tr>
<td>Female:</td>
</tr>
</tbody>
</table>

**% of meetings documented in minutes in the last quarter:**

**Enterprise development grant (EDP) process:**

- EDP service provider contracting negotiation held [ ]
- Enterprise activity implementation schedule (EAIS) agreed [ ]
- EDP service provider contract signed [ ]

**Number of monthly EIAs progress reports submitted by Ward CDDCs to CVCDC and by CVCDC to CPCU:**

<table>
<thead>
<tr>
<th>CVCDC</th>
<th>Ward CDDC progress reports submitted to CVCDG in last quarter</th>
<th>CVCD reports submitted to CPCU in last quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ward A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ward B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ward C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Etc</td>
<td></td>
</tr>
</tbody>
</table>
Annex D.5: Producer organisation development tracker

D.5.1 Producer organisation development status

<table>
<thead>
<tr>
<th>Section 1: Basic information on the producer organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of producer organisation:</td>
</tr>
<tr>
<td>Type of organisation</td>
</tr>
<tr>
<td>County name:</td>
</tr>
<tr>
<td>Ward name:</td>
</tr>
<tr>
<td>Producer organisation code:</td>
</tr>
<tr>
<td>GPS Coordinates:</td>
</tr>
<tr>
<td>Date established:</td>
</tr>
<tr>
<td>Main activity engaged in:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 2: Organisational development status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of members:</td>
</tr>
<tr>
<td>Registration status</td>
</tr>
<tr>
<td>Management committees in place: (tick box for ‘yes’)</td>
</tr>
<tr>
<td>Executive committee:</td>
</tr>
<tr>
<td>Procurement committee:</td>
</tr>
<tr>
<td>Social accountability and integrity committee:</td>
</tr>
<tr>
<td>Grant management committee:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 3: Organisational functioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of meetings held in the last quarter:</td>
</tr>
<tr>
<td>Average % of members attending meetings in the last quarter: Male:</td>
</tr>
<tr>
<td>% of meetings documented in minutes in the last quarter:</td>
</tr>
<tr>
<td>Micro-grant process:</td>
</tr>
<tr>
<td>Enterprise development plan developed</td>
</tr>
<tr>
<td>Micro-grant (EDP) approved</td>
</tr>
<tr>
<td>Micro-grant (EDP) in implementation</td>
</tr>
<tr>
<td>% of financial reports submitted correctly and on time in the last quarter:</td>
</tr>
<tr>
<td>% of grant reports submitted on time in the last quarter:</td>
</tr>
</tbody>
</table>
### Activities conducted in the last quarter:

- Number of training activities held for members:
- Total number of person days of training: Male: | Female:
- Assisting members with production input supply:
- Group / collective production activities:
- Assisting members with agricultural product marketing:
- Table banking / savings and credit activities:
- Other activities (specify):

### Section 4: Organisational performance

#### Scale of production of members:

<table>
<thead>
<tr>
<th>For crops:</th>
<th>Acres of farmland planted by members to target value chain crop:</th>
<th>Total output (kg) by members of target value chain crop:</th>
<th>Total value of output (Ksh) of target value chain crop:</th>
</tr>
</thead>
<tbody>
<tr>
<td>For livestock:</td>
<td>Total head of animals (number of birds) raised by members of target livestock type:</td>
<td>Total output (kg) of target value chain product:</td>
<td>Total value of output (Ksh) of target value chain product:</td>
</tr>
<tr>
<td>For aquaculture:</td>
<td>Total area (square meters) of ponds raised by members of target aquaculture product:</td>
<td>Total output (kg) of target value chain product:</td>
<td>Total value of output (Ksh) of target value chain product:</td>
</tr>
</tbody>
</table>

#### Business services provided to members:

- Total value of production inputs supplied to members:
- Total output of group / collective production activities (kg):
- Total volume (Kg) of agricultural product marketed through the organisation:
- Total value of current group savings:
- Total value of current loans to members:
- Others (specify)

#### Access to CSA seed / breed / fingerling inputs:

- List project-recommended CSA seeds, breeds and fingerlings:
- Does the CIG management know where to access each? Y/N
- Is the distance to source of seed / breed / fingerling acceptable? Y/N

### D.5.2 Producer group member status

For each member of the CIG / VMG:

1. General information
   - Household head: Name: Gender:
   - Household members: Male (adult, children) Female (adult, children)
   - County: Ward: Village:
   - GPS location: Long. Lat.
   - Unique ID number: [Supplied by project]
   - CIG or VMG: Name: CSA value chain focused on:

2. Household income sources
Number of household income generating sources (e.g. farming, livestock; wage employment; non-farm enterprise; transfers; rent; sale of assets)

<table>
<thead>
<tr>
<th>3. General agricultural production in past year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of crop types planted, and for each:</td>
</tr>
<tr>
<td>Area planted (ha)</td>
</tr>
<tr>
<td>TIMPs applied to each crop type (select from list prepared by M&amp;E Working Group)</td>
</tr>
<tr>
<td>Number of livestock types raised, and for each:</td>
</tr>
<tr>
<td>Number (head) raised.</td>
</tr>
<tr>
<td>TIMPs applied to each animal type (select from list prepared by M&amp;E Working Group)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Production of CIG/VMG target agricultural product:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target field crop type:</td>
</tr>
<tr>
<td>Area planted</td>
</tr>
<tr>
<td>Yield per unit area</td>
</tr>
<tr>
<td>TIMPs applied (select from list prepared by M&amp;E Working Group)</td>
</tr>
<tr>
<td>Marketed volume (kg) and marketed value (KSh) of each crop type</td>
</tr>
<tr>
<td>Target livestock type:</td>
</tr>
<tr>
<td>Number (head) raised</td>
</tr>
<tr>
<td>TIMPs applied to each animal type (select from list prepared by M&amp;E Working Group)</td>
</tr>
<tr>
<td>Products sold from each type (e.g. live animals, milk, meat etc)</td>
</tr>
<tr>
<td>Marketed volume (kg) and marketed value (KSh) of each product from each animal type</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Access to services and social networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in associations (number, type)</td>
</tr>
<tr>
<td>Number of person training days received on agriculture in the past quarter (by gender of trainee)</td>
</tr>
<tr>
<td>Number of farm visits by extension worker or advisory services in past quarter (by type: government, donor project, NGO, cooperative, other)</td>
</tr>
<tr>
<td>Access to / use of agro-weather or market information: whether in the past quarter the household received weather forecasts, agro-weather advisories or market information; channels used to access the information; satisfaction with information / advisories received.</td>
</tr>
<tr>
<td>Access to credit: Whether the household has a loan / debt in the last month, source (e.g. informal or formal institution type), and value of loan.</td>
</tr>
</tbody>
</table>
Annex D.6 Community scorecard for CIG/VMG micro-projects

The Community Score Card (CSC) method presented here is taken from the Western Kenya Community-Driven Development and Flood Mitigation Project CDD Manual for Communities. It has been slightly adapted to fit with the KCSAP institutional arrangements for micro-projects.

CSC is a tool for community-based monitoring and performance evaluation of community institutions, services and projects. The objective of the tool is to influence the quality, efficiency and accountability with which services are provided at the community level. The communities and service providers can use CSC to:

- Track inputs or expenditures of a community service or project
- Monitor the quality of services and projects over time
- Strengthen community voice and empowerment
- Generate feedback mechanism between communities and service providers

The CSC process has four components:

1. Input tracking scorecard
2. Community generated performance scorecard
3. Self-evaluation scorecard by service providers and
4. Interface meeting between the community (users) and service providers to provide respective feedback and generate a mutually agreed reform agenda

1. **Input Tracking Matrix**

An input tracking matrix is developed by project beneficiaries and service providers in a meeting at the community as shown in Table C.4.1.

i. In order to be able to track inputs, budgets or entitlements one must start by having data from the supply side.

ii. Tell the community and the project/facility staff about the budgets or entitlements available. This is the initial stages of letting the community know their ‘rights’ and providers their ‘commitments.’

iii. These resources are then converted to a set of **measurable input indicators** that will be tracked. These will depend on which project or service is under scrutiny.

iv. The input matrix can be used to track the actual inputs made against the planned inputs. Wherever possible each of the statements of the group member should be substantiated with any form of concrete evidence (receipt, account, actual drugs or food, etc.). One can triangulate or validate claims across different participants as well. In the case of physical inputs or assets one can inspect the input (like Community water Tank) to see if it is of adequate quality/complete. One can also do this in the case of some of the physical inputs -like number of mosquito nets present at the CDDC office-in order to provide first hand evidence about project and service delivery.
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### 2. Community Scoring of Performance

Community scoring of performance is done through the following process:

i. Once the community has gathered, the facilitators (both local and external) face the task of classifying participants in a systematic manner into focus groups. The most important basis for classification must be usage, in order to ensure that there are a significant number of users in each of the focus groups. Without this critical mass, no useful data can be solicited. Each group should further have a heterogeneous mix of members based on age, gender, and occupation so that a healthy discussion can ensue.

ii. Each of the focus groups must brainstorm to develop performance criteria with which to evaluate the facility and services under consideration. The facilitators must use appropriate guiding or ‘lead-in’ questions to facilitate this group discussion. Based on the community discussion that ensues, the facilitators need to list all issues mentioned and assist the groups to organize them into measurable or observable performance indicators. The facilitating team must ensure that everyone participates in developing the indicators so that a critical mass of objective criteria are brought out.

iii. The set of community generated performance indicators need to be finalized and prioritized. In the end, the number of indicators should not exceed 5-8.

iv. When progress is being tracked, the facilitators must ask the focus groups to give relative scores for each performance indicator. The scoring process can take separate forms – either through a consensus in the focus group, or through individual voting followed by group discussion. A scale of 1-100 is used for scoring, with the higher score being ‘better’.

v. In order to draw people’s perceptions better it is necessary to ask the reasons behind both low and high scores. This helps explain outliers and provides valuable information and useful anecdotes regarding service delivery.

vi. The process of seeking user perceptions alone would not be fully productive without asking the community to come up with its own set of suggestions as to how things can be improved based on the performance criteria they came up with. This is the last task during the community gathering, and completes the generation of data needed for the CSC.

---

**Table D.6.1 Input tracking matrix**

<table>
<thead>
<tr>
<th>Input Indicator</th>
<th>Entitlement/Planned</th>
<th>Actual</th>
<th>Remarks/Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fingerlings per pond</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ken Brew chicks per welfare group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Funds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brooders</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table D.6.2: A Sample Community Generated Performance Scorecard TCB Farming

<table>
<thead>
<tr>
<th>No</th>
<th>Input indicator</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D=C-B</th>
<th>Reasons</th>
<th>Score (0-100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60 farmers trained on TCB husbandry</td>
<td>0</td>
<td>13</td>
<td>10</td>
<td>-3</td>
<td></td>
<td>76</td>
</tr>
<tr>
<td>2</td>
<td>Positive Attitude of Farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Management of Green Houses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Quality Management of Farms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Equal access to Green houses for all community farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Equal access to Extension services for all community farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table D.6.3 Example of a Sample of a Community Scorecard within a Focus Group

<table>
<thead>
<tr>
<th>Community Generated Criteria</th>
<th>SCORING</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very</td>
<td>Bad</td>
</tr>
<tr>
<td>1) Positive Attitude of Farmers</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>2) Management of Green Houses</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>3) Quality Management of Farms</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>4) Equal access to Green Hses for all community farmers</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>5) Equal access to Extension services for all community farmers</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>
For the final evaluation of a micro-project, community scoring should result in a final score for each indicator, which compares the percent of each target that has been achieved or indicates community satisfaction with performance along each indicator. An average must be calculated across all the performance indicators. The following rating scheme will be applied to the resulting average:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Poor</td>
<td>20%</td>
</tr>
<tr>
<td>Poor</td>
<td>35%</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>50%</td>
</tr>
<tr>
<td>Successful</td>
<td>60%</td>
</tr>
<tr>
<td>Very Successful</td>
<td>80% and above</td>
</tr>
</tbody>
</table>

Very Successful - 80% and above
Annex D.7 Common Performance Measurement Framework

The KCSAP Matching Grants Manual indicates that county and PPP sub-grants shall be monitored and evaluated using participatory M&E approaches. The specific methods, roles and responsibilities and scheduling for M&E activities is to be elaborated in each sub-grant project proposal in the form of a sub-project M&E plan. The purpose of this framework is to set out a common performance measurement approach that can be used together with participatory indicators to meet project specific needs while also meeting overall project needs for information.

In brief, each sub-project should develop its own results framework as part of the sub-project proposal, and progress will be measured against this results framework. Each sub-project results framework shall include all relevant mandatory indicators from the CPMF (Table D.7.1). Where necessary, capacity building support may be required for development of sub-project results frameworks, and M&E activities (including any technical assistance or service providers required during implementation of M&E by sub-projects) should be included in the sub-project budget. The following sub-sections give further guidance on elaboration of project-specific indicators and the mandatory CPMF indicators.

1. **Performance indicators specific to the sub-grant**

Each sub-project shall have a list of project activities and a planned implementation schedule. This list and schedule will be used to monitor progress and completion rates.

Each sub-project shall determine 4-7 project-specific performance indicators. The following steps may be a useful guide:

**Step 1:** List the outcomes that the project intends to achieve and the outputs that contribute to that outcome.

**Step 2:** For each outcome and outputs or milestones, list possible measurement indicators.

**Step 3:** Assess possible indicators using the following criteria:

**Specific:** The indicator measures only the output or outcome that is intended for measurement, and not any other elements in the project.

**Measurable:** There are practical ways of measuring the indicator, being clear and unambiguous in terms of what is being measured. Measurable indicators may be quantitative or qualitative.

**Attributable:** Change in the indicator reflects the effects of the intervention.

**Realistic:** Collecting the data must be feasible with the available resources.
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- **Measurable:** There are practical ways of measuring the indicator, being clear and unambiguous in terms of what is being measured. Measurable indicators may be quantitative or qualitative.
- **Attributable:** Change in the indicator reflects the effects of the intervention.
- **Realistic:** Collecting the data must be feasible with the available resources.
- **Timebound:** The indicator has an associated time frame. The indicator should state when it will be measured.

Step 4: Select the most appropriate indicators, and include them in the sub-project contract agreement.

It is good practice to hold discussions about outcomes and measurement indicators together with project beneficiaries and other stakeholders, as they will have different perspective about what outcomes matter to them and are worth measuring.

2. Mandatory performance indicators

The sub-grant contract shall indicate which of the indicators listed in the following tables are relevant to the sub-project. All relevant indicators must be monitored and reported. The specific monitoring methods can be chosen by the grantee, but must be consistent with the guidance provided in the table.
### Table D.7.1: Common measurement framework for mandatory indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Notes</th>
<th>Methodological guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>% completion rates</td>
<td>All sub-projects shall report % completion rates in quarterly reports.</td>
<td>Completion rates are calculated as the % of planned activities that have been completed.</td>
</tr>
<tr>
<td>Beneficiary satisfaction with the goods and services provided in the sub-project</td>
<td>All county- and PPP sub-projects shall monitor this indicator</td>
<td>Where direct beneficiaries are identifiable, a sample survey of beneficiary households shall be undertaken. Where beneficiary households cannot be identified, discussions shall be held with stakeholder committees or other stakeholder representatives (e.g. local chief’s office, ward officials, CDDCs in the area) to quantify satisfaction rates.</td>
</tr>
<tr>
<td>Number of direct project beneficiaries in county sub-grant projects reached with agricultural / animal husbandry assets or services</td>
<td>All county sub-grants must report this using method consistent with the following guidance</td>
<td>All sub-projects that provide direct goods and services to households (e.g. agricultural extension or advisory services) must register each individual household. If the beneficiaries are project-registered CIG/VMG members, the project registration number shall be used to ensure no double-counting with beneficiaries of other project interventions. If they are not CIG/VMG members, a new number shall be given. If the project provides public goods or makes investments where specific beneficiary households cannot be identified, census or administrative data shall be used to estimate the number of households and their population that are likely to benefit.</td>
</tr>
<tr>
<td>Infrastructure rehabilitated or constructed by county sub-grants</td>
<td>Only county sub-grants that invest in infrastructure rehabilitation or construction shall monitor this indicator</td>
<td>Types of infrastructure shall follow the categories indicated in a list to be confirmed by the M&amp;E Working Group. The numbers and units used will also follow the guidance set by the M&amp;E Working Group</td>
</tr>
<tr>
<td>Client-days of training provided on TIMPS through county sub-grant projects</td>
<td>All county sub-grants providing training to farmers/pastoralists on TIMPs must report this indicator</td>
<td>When training involves TIMPs listed in the project TIMP inventory, the number of person days of training and the gender of trainees in all training activities shall be recorded and reported in quarterly progress reports</td>
</tr>
<tr>
<td>Client-days of training provided on TIMPS through PPP sub-grant projects</td>
<td>All PPP sub-grants providing training to farmers/pastoralists on TIMPs must report this indicator</td>
<td></td>
</tr>
<tr>
<td>Targeted beneficiaries in CIGs/VMGs who have adopted at least one TIMP promoted by the project</td>
<td>All projects involving household- and community-level adoption of TIMPs shall monitor this indicator. Adoptions of TIMPs listed in the project TIMP inventory shall be monitored. Adoption is counted when a household or members of a community practice the TIMP. The beneficiary baseline should measure and adopt TIMPs and subsequent surveys should mark adoption as continuing (or discontinued) and count only new adoption in each reporting period. Adoption by men, women, and men and women jointly shall be monitored. Members of households that are CIG/VMG members shall be identified and reported separately from members of non-CIG/VMG households in order to avoid double counting.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Head of livestock to which TIMPs are applied as a result of the project</td>
<td>Only projects promoting adoption of livestock-related TIMPs need to report this. Where the intervention is applied to individual livestock (e.g. vaccination, AI), each animal is counted as brought under the TIMP. Where the TIMP is applied to herds/flocks of animals (e.g. selective culling), all animals in the herd/flock are counted as under the TIMP. Where the TIMP is applied to a land area (e.g. restoration of grazing land), count the number of animals using that land. Animals belonging to CIG/VMG members shall be separately recorded from non-CIG/VMG members’ animals to avoid double counting.</td>
<td></td>
</tr>
<tr>
<td>Area of land (ha) to which TIMPs are applied as a result of the project</td>
<td>Only projects promoting adoption of land-based TIMPs need to report this. Measure the number of new hectares under new technologies for the current reporting period (disaggregated by TIMP). Land belonging to CIG/VMG members shall be separately recorded from non-CIG/VMG members’ land to avoid double counting.</td>
<td></td>
</tr>
<tr>
<td>Change in productivity of selected agricultural commodities supported by the project</td>
<td>Only projects that directly aim to increase crop or livestock productivity and not involving CIG/VMG members shall report this indicator. CIG/VMG members’ productivity change is tracked by their CIG/VMG. Productivity of field crops is measured as yield (kg) per unit crop area (e.g. per acre, per hectare). Productivity of livestock products is measured as yield (kg) per head of livestock. Change in productivity is calculated as the difference between productivity of a given product at a later date (t2) and productivity of that same project at an earlier date (t1). The percentage change in productivity is calculated as ((yield(<em>{t2}) – yield(</em>{t1}))/yield(_{t1})) * 100. The...</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Value of agricultural output of targeted agricultural products sold by project direct beneficiaries (US$)</td>
<td>Only projects that directly aim to increase marketed volume or value and not involving CIG/VMG members shall report this indicator. CIG/VMG members’ marketed value is tracked by their CIG/VMG.</td>
</tr>
</tbody>
</table>
3. Sub-project M&E plan

Once project-specific and mandatory indicators have been identified, each sub-project shall produce and implement an M&E plan. The sub-project M&E plan shall record:

- The indicators to be measured and units of measurement
- Baseline and target values against which results will be measured
- Methods for collecting data
- Frequency/schedule for data collection
- Responsible parties for data collection, aggregation and reporting
- Resources required.
### Annex D.8 Collaborative Research Grant Reporting Template

<table>
<thead>
<tr>
<th>Grant contract number</th>
<th>Report Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ Quarter 1 (January 1 - March 31)</td>
</tr>
<tr>
<td></td>
<td>□ Quarter 2 (April 1 - June 30)</td>
</tr>
<tr>
<td></td>
<td>□ Quarter 3 (July 1 - September 30)</td>
</tr>
<tr>
<td></td>
<td>□ Quarter 4 (October 1 - December 31)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of grantee institution:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Start Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Original Project End Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Project End Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of Work Completed to Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

### Project Schedule Status:

- [ ] On Schedule
- [ ] On Revised Schedule
- [ ] Ahead of Schedule
- [ ] Behind Schedule

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal Investigator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Project Description

Present a progress schedule depicting (1) a schedule of research activities tied to each task defined in the proposal; (2) a percentage completion of each task.

Project Deliverables

List planned deliverables that will be provided to KCSAP at the end of the project (e.g. final report, software, user’s manual, data files, etc.)

Progress this Quarter (includes meetings, work plan status, significant progress, etc.)

Anticipated Work for next Quarter

Significant Results

Circumstance affecting project or budget.

Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and fiscal constraints set forth in the agreement, along with recommended solutions to those problems.

Reporting on mandatory indicators: Use this table to provide indicator values for each relevant indicator. If the indicator is not relevant to your project, write ‘not relevant’. If the indicator is relevant, but it is too early to achieve change in the indicator, give the value ‘0’. For any indicator with a change reported in this quarter, attach supporting information (e.g. description of relevant activities, training participant lists, or description of other outcomes achieved).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Cumulative values reported in previous quarters</th>
<th>Value reported at the end of the current reporting quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSA TIMPS released</td>
<td></td>
<td></td>
</tr>
<tr>
<td>research fairs convened</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information exchange platforms established</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSA TIMP ToT person training days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trainers trained through ToTs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of TIMPs included in ToT training provided</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of equipment / facility refurbishment procurement plan completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate training completed (MSc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Postgraduate training completed (PhD)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of individuals completing short-term technical training courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of farmers participating in on-farm trials (male, female)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of on-farm trials on TIMPs that have been completed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of TIMPs tested on farm that were successfully validated</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of ToT manuals produced</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of curricula or training modules piloted</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex E: Method for monitoring GHG intensity

GHG intensity (kgCO$_2$e / kg product) will be estimated for 4 agricultural products (sorghum, millet, cassava, dairy cow milk) at baseline, mid-term and project completion. Consistent data collection and analysis methods must be used for each period. Because accurate estimation of GHG intensity requires data on farm management practices that are more detailed that data required for regular project monitoring, and analytical skills required to estimate GHG emissions are relatively specialist, data collection and analysis will be sub-contracted to a consultant. This annex provides guidance on sampling approach, data collection needs and analysis methods, which will be a useful guide for the NPCU when drafting ToRs for contracting and for the contracted consultants. The guidance is presented separately for field crop GHG intensity estimation and dairy milk GHG intensity estimation because different analytical tools will be used to quantify GHG emission intensity, and each tool has different input data and sampling requirements.

E.1 Field crop GHG intensity

E.1.1 Sampling

The project will register all direct project beneficiaries who are members of CIGs, VMGs and other producer organisations. At registration, a beneficiary baseline will be conducted. The beneficiary baseline will collect data for each household for the previous year (i.e. prior to project activities) on which crops they cultivated, how many acres and how much yield they realised at harvest. For the baseline estimate of GHG emission intensity, the consultant will use the beneficiary baseline data to select a representative sample of households producing each of the target agricultural products.

E.1.2 Data collection needs

Data collection needs are determined by the GHG quantification method or tool to be used. For field crop products (i.e. sorghum, millet, cassava), GHG emission intensity will be estimated using the Cool Farm Tool (CFT). The CFT uses input data to calculate both GHG emissions per unit area and per unit crop product. The data input needs are shown in Table E.1.1. If any of these crops are intercropped with other crops (e.g. legumes), an estimate of DM yield for the non-target crop shall be obtained and GHG emissions apportioned in proportion to relative DM yield (i.e. a physical allocation rule).

Table E.1.1: Input data required by CFT to estimate GHG emissions from field crops

- Crop name
- Crop area
- Yield
- Planting date

---

20 https://coolfarmtool.org/
- Harvest date
- Use of residues (removed from field for use or sale, burnt, left on field, removed: forced aeration compost, removed: non-forced aeration compost, removed: left in heaps)
- Soil texture (clay, silt, sandy)
  - Soil type (sandy clay, clay, silty clay, sandy clay loam, clay loam, silty clay loam, sand, loamy sand, sandy loam, loam, silt loam, silt)
  - Soil organic matter
  - Soil moisture average (moist, dry)
  - Soil moisture at sowing (wet, moist, dry)
  - Soil drainage (good, poor)
  - Soil pH
- Fertilizer name
  - Fertilizer manufactured in (country)
  - Application rate (amount per area)
  - Application method (in solution, broadcast, incorporate, fertigation)
  - Emissions inhibitor (none, nitrification inhibitor)
- Pesticide type (seed treatment, soil treatment, post-emergence)
  - Number of doses
- Has any part of the field been converted between arable land, grassland, or forest in the last 20 years
  - (From arable -> grassland, arable -> forest, grass -> arable, grass -> forest, forest -> grass)
  - How many years ago
  - Percentage converted
- Have you changed tillage practices in last 20 years
  - (From/to conventional till, no till, reduced till)
  - How many years ago
  - Percentage converted
- Have you started/stopped using cover crops in last 20 years
  - (From/to cover, no cover)
  - How many years ago
  - Percentage converted
- Trees growing within project area
  - Tree species (must fill out for each tree species)
    - Density
    - Size in meters last year
    - Size in meters this year
    - Trees added/lost in last year
- Energy use (must fill out for each type of energy used throughout supply chain)
  - Type of fuel
  - Amount used
  - Where used (field, processing)
- Irrigation
  - Method (pivot, drip, rain gun, flood)
- Harvest date
- Use of residues (removed from field for use or sale, burnt, left on field, removed: for compost, removed: non-forced aeration compost, removed: left in heaps)
- Soil texture (clay, silt, sandy)
- Soil type (sandy clay, clay, silty clay, sandy clay loam, clay loam, silty clay loam, sand, loamy sand, sandy loam, loam, silt loam, silt)
- Soil organic matter
- Soil moisture average (moist, dry)
- Soil moisture at sowing (wet, moist, dry)
- Soil drainage (good, poor)
- Soil ph
- Fertilizer name
- Fertilizer manufactured in (country)
- Application rate (amount per area)
- Application method (in solution, broadcast, incorporate, fertigation)
- Emissions inhibitor (none, nitrification inhibitor)
- Pesticide type (seed treatment, soil treatment, post-emergence)
- Number of doses
- Has any part of the field been converted between arable land, grassland, or forest in the last 20 years
  - (From arable -> grassland, arable -> forest, grass -> arable, grass -> forest, forest -> grass)
  - How many years ago
  - Percentage converted
- Have you changed tillage practices in last 20 years
  - (From/to conventional till, no till, reduced till)
  - How many years ago
  - Percentage converted
- Have you started/stopped using cover crops in last 20 years
  - (From/to cover, no cover)
  - How many years ago
  - Percentage converted
- Trees growing within project area
  - Tree species (must fill out for each tree species)
  - Density
  - Size in meters last year
  - Size in meters this year
  - Trees added/lost in last year
- Energy use (must fill out for each type of energy used throughout supply chain)
  - Type of fuel
  - Amount used
  - Where used (field, processing)
- Irrigation
  - Method (pivot, drip, rain gun, flood)
  - Volume
  - % área irrigated
  - Pumping depth
  - Horizontal distance
  - Power source (diesel, electric, gravity)
- Waste water production
  - Volume containing organic material
  - Oxygen demand (quantity per volume of water)
  - Oxygen demand type (biochemical, chemical)
  - Treatment process (none: discharge to river/lake/stream, none: stagnant, none: fast-flowing, centralized aerobic treatment, sludge anaerobic digestion, anaerobic reactor, anaerobic lagoon with depth less than 2m, anaerobic lagoon with depth greater than 2m)
- Transportation
  - Mode
  - Weight
  - Distance

E.1.3 Data analysis

GHG emission intensity should be estimated separately for each household sampled, so that average emission intensity is reported together with estimates of standard deviation. Analysis should also be applied to sub-groups, e.g. lower and upper quartile as defined by yield, so as to enable analysis of change in emission intensity for more and less highly productive household types and analysis of changes in which practices are driving changes in emission intensity.

E.2 Dairy cow milk GHG intensity

For dairy cow milk, GHG emission intensity will be estimated following the Gold Standard Smallholder Dairy Methodology. This is because the Gold Standard methodology is proposed as the basis for monitoring in Kenya’s Dairy Nationally Appropriate Mitigation Action (Dairy NAMA), so using this methodology will support Kenya in monitoring results of national climate change mitigation actions.

E.2.1 Sampling

The general guidance on sampling in the Gold Standard Smallholder Dairy Methodology shall be followed. This requires a regionally representative sample survey to be conducted. The region representing the sampling population shall be defined as follows. Previous work by the State

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21 http://www.fao.org/3/a-i6260e.pdf
Department of Livestock and FAO\textsuperscript{23} typified each county in the country by dairy production systems as either intensive, semi-intensive or extensive. A previous representative survey has already been done covering counties allocated to the intensive dairy production system. Within the scope of KCSAP, two surveys should be conducted to collect representative data on semi-intensive and extensive dairy production systems within the KCSAP project counties. Table E.2.1 indicates the allocation of each of the KCSAP project counties to each of the production systems.

For the semi-intensive and extensive production systems, stratified random sampling methods should be used, with counties, wards and villages selected at random, and clusters of 10-20 households per village.

\textsuperscript{23} \url{http://www.fao.org/3/a-i7669e.pdf}
Department of Livestock and FAO typified each county in the country by dairy production systems as either intensive, semi-intensive or extensive. A previous representative survey has already been done covering counties allocated to the intensive dairy production system. Within the scope of KCSAP, two surveys should be conducted to collect representative data on semi-intensive and extensive dairy production systems within the KCSAP project counties. Table E.2.1 indicates the allocation of each of the KCSAP project counties to each of the production systems.

For the semi-intensive and extensive production systems, stratified random sampling methods should be used, with counties, wards and villages selected at random, and clusters of 10-20 households per village.

Table E.2.1: KCSAP counties by production system (I=intensive, SI=semi-intensive, E=extensive)

<table>
<thead>
<tr>
<th>Production System</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>West Pokot</td>
</tr>
<tr>
<td>E</td>
<td>Baringo</td>
</tr>
<tr>
<td>E</td>
<td>Laikipia</td>
</tr>
<tr>
<td>I</td>
<td>Nyeri</td>
</tr>
<tr>
<td>E</td>
<td>Tharaka Nithi</td>
</tr>
<tr>
<td>E</td>
<td>Lamu</td>
</tr>
<tr>
<td>E</td>
<td>TaitaTaveta</td>
</tr>
<tr>
<td>E</td>
<td>Kajiado</td>
</tr>
<tr>
<td>E</td>
<td>Machakos</td>
</tr>
<tr>
<td>E</td>
<td>Marsabit</td>
</tr>
<tr>
<td>E</td>
<td>Isiolo</td>
</tr>
<tr>
<td>E</td>
<td>Tana River</td>
</tr>
<tr>
<td>SI</td>
<td>Busia</td>
</tr>
<tr>
<td>SI</td>
<td>Siaya</td>
</tr>
<tr>
<td>SI</td>
<td>Nyandarua</td>
</tr>
<tr>
<td>SI</td>
<td>Bomet</td>
</tr>
<tr>
<td>SI</td>
<td>Kericho</td>
</tr>
<tr>
<td>SI</td>
<td>Kakamega</td>
</tr>
<tr>
<td>SI</td>
<td>UasinGishu</td>
</tr>
<tr>
<td>E</td>
<td>Elgeyo Marakwet</td>
</tr>
<tr>
<td>E</td>
<td>Kiseru</td>
</tr>
<tr>
<td>E</td>
<td>Garissa</td>
</tr>
<tr>
<td>E</td>
<td>Wajir</td>
</tr>
<tr>
<td>E</td>
<td>Mandera</td>
</tr>
</tbody>
</table>

*Nyandarua has already been covered in the survey of intensive production systems as its allocation to SI was later challenged.

E.2.2 Data collection needs

The data needs for the Gold Standard methodology are shown in Table E.2.2. Each parameter table in Table E.2.2 indicates whether the parameter should be derived from the household survey or from other sources.

Table E.2.2: Input data required by Gold Standard Smallholder Dairy Methodology to estimate GHG emissions from dairy cow milk production

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>Milkfat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>%/kg milk</td>
</tr>
<tr>
<td>Description:</td>
<td>Fat content of milk</td>
</tr>
<tr>
<td>In survey?</td>
<td>No, use literature values.</td>
</tr>
<tr>
<td>Comment:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>Milkprotein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>%/kg milk</td>
</tr>
<tr>
<td>Data Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Protein content of milk</td>
<td>No, use literature values.</td>
</tr>
<tr>
<td>Data Parameter</td>
<td>DE%</td>
</tr>
<tr>
<td>Data Parameter</td>
<td>YM</td>
</tr>
<tr>
<td>Data Parameter</td>
<td>Cf_i</td>
</tr>
<tr>
<td>Data Parameter</td>
<td>C_a</td>
</tr>
<tr>
<td>Data Parameter</td>
<td>Hours</td>
</tr>
<tr>
<td>----------------</td>
<td>-------</td>
</tr>
<tr>
<td>Data Unit:</td>
<td>Hours(^{-1}) * head(^{-1}) * day(^{-1})</td>
</tr>
<tr>
<td>Description:</td>
<td>Number of hours of work per day for the (i)th animal</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes.</td>
</tr>
<tr>
<td>Comment:</td>
<td>Survey values should then be averaged over the year to get estimate of average daily hours worked</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>(C_{\text{pregnancy}})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>Unitless</td>
</tr>
<tr>
<td>Description:</td>
<td>Coefficient used in calculating net energy for pregnancy</td>
</tr>
<tr>
<td>In survey?</td>
<td>No, use IPCC value.</td>
</tr>
<tr>
<td>Comment:</td>
<td>Number of days in the year each cow was pregnant can be estimated from date of last calving and calving interval in survey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>BW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>kg/animal</td>
</tr>
<tr>
<td>Description:</td>
<td>Live weight of the animals in the population</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes, survey should measure heart girth measurements and use this to estimate live weight.</td>
</tr>
<tr>
<td>Comment:</td>
<td>The survey should sample animals at different ages for each type of dairy cattle, thus estimating average BW for animals of each type at different ages, which can then be used to estimate the weight of animals not measured.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>kg/animal</td>
</tr>
<tr>
<td>Description:</td>
<td>Mature body weight of an adult female in moderate body condition</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes. Tables 2.2 and 3.1</td>
</tr>
<tr>
<td>Comment:</td>
<td>Mature is taken as BW after 4(^{th}) parity. Parity data should therefore be collected and body condition of measured animals noted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>WG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>kg day(^{-1})</td>
</tr>
<tr>
<td>Description:</td>
<td>Average daily weight gain of the animals in the population</td>
</tr>
<tr>
<td>Data Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>$C_g$</td>
<td>Coefficient used in calculating net energy for growth</td>
</tr>
<tr>
<td>$EF_{FEED}$</td>
<td>Emission factor for embodied emissions in each feed type</td>
</tr>
<tr>
<td>Feed</td>
<td>Quantity of each type of feed (roughage, concentrate and organic or inorganic supplements) consumed by the animals</td>
</tr>
<tr>
<td>$VS_i$</td>
<td>Daily Volatile Solids excreted per animal</td>
</tr>
</tbody>
</table>

**In survey?**
- **$C_g$**: No. To be calculated from measured LW of cattle at different ages
- **$EF_{FEED}$**: Data can be collected to estimate feed emission LCA for on-farm fodder production. Analysis and specific data needs should follow guidelines in LEAP Environmental Performance of Animal Feeds Supply Chains. Or, feed emission values can be taken from publications and international databases.
- **Feed**: Yes, including fodder and crop residues fed, and concentrate feeds and other supplements
- **$VS_i$**: No.
<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>B_{0,j}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit</td>
<td>(m^3 CH_4 * kg^{-1} of VS excreted)</td>
</tr>
<tr>
<td>Description</td>
<td>Maximum methane producing capacity</td>
</tr>
<tr>
<td>In survey?</td>
<td>No.</td>
</tr>
<tr>
<td>Comment</td>
<td>Default values for the maximum methane producing capacity can be found in Table 10A-4 of IPCC 2006 Vol.4 Ch. 10, Annex 10A.2, page 10.77</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>MCF_{S,i}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit</td>
<td>Unitless</td>
</tr>
<tr>
<td>Description</td>
<td>Methane conversion factor specific to manure management systems</td>
</tr>
<tr>
<td>In survey?</td>
<td>No</td>
</tr>
<tr>
<td>Comment</td>
<td>MCF can be found in Table 10.17, IPCC 2006 Vol.4 Ch. 10. Need to match sample sites with annual average temperature to select appropriate value from the IPCC tables.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>MS_{S,i}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit</td>
<td>Unitless</td>
</tr>
<tr>
<td>Description</td>
<td>Fraction of the manure handled using the manure management system</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes, Table 5.2.</td>
</tr>
<tr>
<td>Comment</td>
<td>Manure management categories should match with IPCC categories in IPCC Table 10.17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>AFC_k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit</td>
<td>Months^{-1}</td>
</tr>
<tr>
<td>Description</td>
<td>Average age at first calving of cows in stratum k</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes</td>
</tr>
<tr>
<td>Comment</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>AE_k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit</td>
<td>Head</td>
</tr>
</tbody>
</table>

Comment: Volatile solids calculated using IPCC Tier 2 method (Equation 10.24), which requires GE and DE% from the survey, and urinary energy and ash content from literature values.
<table>
<thead>
<tr>
<th>Description</th>
<th>Number of mature females exiting farms in stratum k due to culling, sales, gifts or other reasons in the year prior to the baseline survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>In survey?</td>
<td>Yes</td>
</tr>
<tr>
<td>Comment:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>CE&lt;sub&gt;k&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>Head</td>
</tr>
<tr>
<td>Description:</td>
<td>Number of calves and heifers exiting farms in stratum k due to culling, sales, gifts or other reasons in the year prior to the baseline survey</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes</td>
</tr>
<tr>
<td>Comment:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>CH&lt;sub&gt;k&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>Head</td>
</tr>
<tr>
<td>Description:</td>
<td>Number of calves and heifers on farms in stratum k in the baseline survey</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes</td>
</tr>
<tr>
<td>Comment:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>SR&lt;sub&gt;k&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>Ratio</td>
</tr>
<tr>
<td>Description:</td>
<td>Sex ratio of calves born in stratum k in the baseline survey</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes</td>
</tr>
<tr>
<td>Comment:</td>
<td>Can use literature values, if available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>CD&lt;sub&gt;k&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Unit:</td>
<td>Head</td>
</tr>
<tr>
<td>Description:</td>
<td>The number of calves on farms in stratum k that died in the year prior to the baseline survey</td>
</tr>
<tr>
<td>In survey?</td>
<td>Yes</td>
</tr>
<tr>
<td>Comment:</td>
<td></td>
</tr>
<tr>
<td>Data Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>CB&lt;sub&gt;k&lt;/sub&gt;</td>
<td>The number of calves born on farms in stratum k in the year prior to the baseline survey</td>
</tr>
<tr>
<td>BL&lt;sub&gt;k&lt;/sub&gt;</td>
<td>Average working lifetime of a bull in stratum k</td>
</tr>
<tr>
<td>NCB&lt;sub&gt;k&lt;/sub&gt;</td>
<td>Average non-completion rate for bull replacements on farms in stratum k in the baseline survey</td>
</tr>
<tr>
<td>REDD+ Programme</td>
<td>Existence and extent of a REDD+ programme in the geographic region related to feed for the project</td>
</tr>
<tr>
<td>LK&lt;sub&gt;LUCA&lt;/sub&gt;&lt;sub&gt;t&lt;/sub&gt;</td>
<td>Leakage due to land use change due to changing demand for feedstuffs due to project implementation in project year t</td>
</tr>
<tr>
<td>Dairy farm stratum</td>
<td></td>
</tr>
</tbody>
</table>

Kenya Climate-Smart Agriculture Project

Data Unit: Head

Comment: Can use literature values, if available.

Data Parameter: Dairy farm stratum
<table>
<thead>
<tr>
<th>Data Parameter</th>
<th>Description</th>
<th>Data Unit</th>
<th>In survey?</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual total milk yield per farm</td>
<td>The project proponents shall identify the dairy farm stratum (e.g. grazing, stall &amp; grazing or zero-grazing) to which each project area can be allocated.</td>
<td>kg milk * farm$^{-1}$ * year$^{-1}$</td>
<td>Yes, characterize farms by grazing, stall &amp; grazing or zero-grazing</td>
<td></td>
</tr>
<tr>
<td>Number of mature lactating and dry cows per farm (HS$_j$)</td>
<td>The number of mature lactating and dry cows in each farm in each year</td>
<td>Head</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Number of bulls maintained per farm (CB$_j$)</td>
<td>The number of bulls maintained on the $j$th farm in each year</td>
<td>Head</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**E.2.3 Data analysis**
The data will be collected to estimate the average emission intensity (kg CO2e / kg FPCM) per farm surveyed following the Gold Standard methodology. Regression analysis will be used to construct a relationship between emission intensity and yield at the regional level. Change in average emission intensity and the emission intensities of lower and upper quartiles as defined by yield can then be estimated on the basis of this relationship. For further details, refer to the Gold Standard Smallholder Dairy Methodology.

Once the relationship between GHG intensity and milk yield has been quantified, in subsequent years, GHG intensity can be determined by monitoring milk yields, and does not need to be determined through re-collection and analysis of the detailed data in the parameter tables listed above.
Annex F: Draft terms of reference for National M&E Working Group

1. Background

.....

2. Objectives

The KCSAP M&E WG serve as an internal forum for inter-departmental technical exchange on the M&E in the project. It has the following objectives:

1. To lead design and harmonization of M&E approaches within KCSAP;
2. To ensure that the data quality management elements incorporated in the M&E system respond to project-specific risks and needs;
3. To support identification of lessons learnt and continuous adaptation of the KCSAP M&E system.

3. Principles

The WG shall demonstrate collective commitment towards transparent and effective results monitoring and evaluation process for KCSAP.


4. Objectives and Tasks

(1) To lead design and harmonization of M&E approaches within KCSAP;

This would involve the following tasks:

- to own and use the KCSAP M&E Manual and refine/complement the manual as need arises;
- To ensure that the M&E components of the PMIS meet each project unit’s needs for information;
- To provide input and advice on technical aspects of implementing the project’s M&E indicators, including indicator definition, standardization of reporting categories, development and use of data collection templates and tools (e.g. digital data collection tools);
- to organize regular working group meetings to share experience and pro-actively seek continuous improvement of the practice;
- To identify indicators and results chains for which support with data analysis is required;
1. Background

2. Objectives

The KCSAP M&E WG serve as an internal forum for inter-departmental technical exchange on the M&E in the project. It has the following objectives:

1. To lead design and harmonization of M&E approaches within KCSAP;
2. To ensure that the data quality management elements incorporated in the M&E system respond to project-specific risks and needs;
3. To support identification of lessons learnt and continuous adaptation of the KCSAP M&E system.

3. Principles


4. Objectives and Tasks

(1) To lead design and harmonization of M&E approaches within KCSAP;

- To provide input and advice on ToRs for surveys, special studies and external evaluations;
- To provide input and advice on ToRs for M&E capacity needs assessments and other studies and evaluations of the M&E system.

- To identify feasible measures to manage data quality risks and ensure that these measures are incorporated in project implementation and M&E procedures at each level;
- To advise on M&E capacity strengthening needs, and organize training or sensitization events on the effective collection and use of monitoring information.

(2) To ensure that the data quality management elements incorporated in the M&E system respond to project-specific risks and needs;

This would involve the following tasks:

- To provide input and advice on the overall operationalization of the KCSAP M&E framework, including the design of the PMIS and project performance dashboard.
- To identify feasible measures to manage data quality risks and ensure that these measures are incorporated in project implementation and M&E procedures at each level;
- To provide input and advice on ToRs for M&E capacity needs assessments and other studies and evaluations of the M&E system.
- To support completion of annual M&E performance reviews;
- To provide input and advice on preparation and delivery of M&E capacity development plans;
- To advise on M&E capacity strengthening needs, and organize training or sensitization events on the effective collection and use of monitoring information.

(3) To support identification of lessons learnt and continuous adaptation of the KCSAP M&E system.

This will involve the following tasks:

- To organize and facilitate internal fora for exchanging experience and lessons learnt on M&E issues during implementation, including the documentation of findings and the possible ways forward;
- To provide timely advice to management on the status of project performance and possible follow-up action for strengthening project implementation (e.g. presentations to NPC and Component leaders, CPCU management, NTAC);
- To recommend improvements to the M&E System and their subsequent implementation.

5. Deliverables

- Series of operational guidelines and protocols (e.g., Indicator reference document, survey tool design, data management and aggregation processes)
- Inputs to design of KCSAP PMIS
- Reporting templates and schedules (including web-based reporting interfaces)
- M&E Performance assessment criteria and templates
- M&E Training Plan with budget and timeline
M&E review workshops and dissemination of lessons learned

6. Membership

The core members of the KCSAP M&E WG are

- the NPCU M&E Officer;
- Project component leaders
- CPCU M&E focal points;
- one M&E focal point each at KALRO/Crop Department, KALRO/Livestock Department and Kenya Meteorological Department (KMD)
- External advisors (as required).

7. Organisation of work

The Working Group will meet at least quarterly, and more regularly during the phase of establishing the M&E system. The NPCU, under the leadership of the M&E Officer, will be responsible for organizing all meetings of the M&E WG. The meetings of the working group are open for observers. The Working Group will be chaired by the NPCU M&E Officer and co-chair (elected at each meeting). The working group will exchange information and foster communication with other stakeholders. Minutes of meetings will be drafted and shared with all Working Group members, the NPCU, the CPCUs and other implementation partners.

Initial list of topics for the M&E Working Group:

- Confirm key indicators to include in the PMIS project performance dashboard
- Decide on method for deriving unique identifier codes for each project beneficiary.
- Standardize categorization of CIGs & VMGs and ensuring no double counting with seed CIGs
- Standardize categorization of TIMPs
- Standardize sub-categorization of CSA seed products (plant seed, livestock breeds, aquaculture seeds/fingerlings)
- Standardize categorization of infrastructure (indicator #33)
- List of mandatory training topics for person training days delivered to county staff (indicator #14)
- Oversee development of operational method to integrate beneficiary numbers, crop/livestock productivity and marketed value data from CIG/VMG, sub-county and PPP grants.
- Adjusting M&E performance assessment criteria based on project-specific needs and risks (Annex G).
Annex G: Draft M&E Performance Assessment templates

G.1 M&E Performance checklist

<table>
<thead>
<tr>
<th></th>
<th>County score</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>County 1</td>
<td>County 2</td>
</tr>
<tr>
<td>Baseline Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Beneficiary baseline survey completed</td>
<td>Yes=1 No=0</td>
<td>1</td>
</tr>
<tr>
<td>2. Beneficiary baseline data available on ALL indicators</td>
<td>Yes=1 No=0</td>
<td>0</td>
</tr>
<tr>
<td>M&amp;E Capacity Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. M&amp;E Capacity Development Plan in place</td>
<td>Yes=1 No=0</td>
<td></td>
</tr>
<tr>
<td>4. Implementation of M&amp;E Capacity Development Plan on track</td>
<td>Yes=1 No=0</td>
<td></td>
</tr>
<tr>
<td>Progress and Results Monitoring System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. CPCU M&amp;E workplan in place and operational (^{24})</td>
<td>Yes=1 No=0</td>
<td>0</td>
</tr>
<tr>
<td>6. CPCU M&amp;E workplan on track</td>
<td>Yes=1 No=0</td>
<td></td>
</tr>
<tr>
<td>7. Producer Group Tracker implemented for ALL CIGs/VMGs in the last reporting period</td>
<td>Yes=1 No=0</td>
<td></td>
</tr>
<tr>
<td>8. ALL county and PPP sub-projects have an M&amp;E Plan in place, that includes ALL relevant Common Performance Measurement indicators</td>
<td>Yes=1 No=0</td>
<td>0</td>
</tr>
<tr>
<td>9. ALL county and PPP sub-projects have reported on their progress and results vis-à-vis their project M&amp;E plan for the latest reporting period</td>
<td>Yes=1 No=0</td>
<td>0</td>
</tr>
<tr>
<td>10. Beneficiary verification surveys were conducted (for the last reporting period)</td>
<td>Yes=1 No=0</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^{24}\) Minimum requirements: ...
<table>
<thead>
<tr>
<th></th>
<th>M&amp;E procedures and systems</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>County progress reports submitted on time for the last reporting period</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>12</td>
<td>The NPCU has provided written guidelines for all CPCUs on what they report on, how, when and to whom</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>13</td>
<td>Clear instructions to all contractors / sub-project grantees have been provided by the NPCU on how to complete the data collection and reporting forms/tools</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>14</td>
<td>The NPCU has shared with all reporting units (CPCUs, SPs/CTDs, sub-project grantees, implementing partners) standard reporting forms/tools</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>15</td>
<td>The standard reporting forms/tools are consistently used by all reporting units (CPCUs, SPs/CTDs, sub-project grantees, implementing partners)</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>16</td>
<td>Feedback is systematically provided to CPCUs on the quality of their reporting (i.e., accuracy, completeness and timeliness)</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>17</td>
<td>There is a written procedure to address late, incomplete, inaccurate and missing reports; including following-up with CPCUs and implementing partners on data quality issues</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>18</td>
<td>If data discrepancies have been uncovered in reports from CPCUs or implementing partners, the M&amp;E Unit has documented how these inconsistencies have been resolved</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>19</td>
<td>The NPCU has clearly documented data aggregation, analysis and/or manipulation steps performed at each level of the reporting system</td>
<td>Yes=1 No=0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Use of M&amp;E findings and recommendations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Action plan that was agreed during the last implementation support mission has been completed as scheduled</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>21</td>
<td>Learning program focused on feeding back M&amp;E findings in place and conducted as schedule</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td>M&amp;E coordination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>22</strong></td>
<td>M&amp;E Working Group established and fully operational (i.e., ToR in place, members identified, at least one meeting convened in the past 6 months)</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td><strong>23</strong></td>
<td>M&amp;E Harmonization Guidelines on survey design and data management prepared</td>
<td>Yes=1 No=0</td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td></td>
<td>(13)</td>
</tr>
</tbody>
</table>

*Use of M&E findings and recommendations*  
**20** Action plan that was agreed during the last implementation support mission has been completed as scheduled  
Yes=1 No=0  
0/1

**21** Learning program focused on feeding back M&E findings in place and conducted as scheduled  
Yes=1 No=0  
0/1
### G.2 Data quality assessment checklist

<table>
<thead>
<tr>
<th>Component of the M&amp;E System</th>
<th>Answer Codes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes - completely</td>
</tr>
<tr>
<td></td>
<td>Partly</td>
</tr>
<tr>
<td></td>
<td>No - not at all</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Self-assessment comments</td>
</tr>
<tr>
<td></td>
<td>(Please provide detail and recommendations for improvement for each response not coded &quot;Yes - Completely&quot;).</td>
</tr>
</tbody>
</table>

#### CPCU M&E structures and functions

1. There is a documented allocation of M&E roles within the CPCU
2. The CPCU has a budgeted M&E workplan for the year
3. Current human resources at the M&E Unit are sufficient to ensure good quality M&E
4. There is a training plan which includes all staff involved in M&E and data collection and reporting at all levels in the reporting process
5. All relevant staff have received training in M&E and on the data management processes and tools

#### CPCU Data management procedures

6. The M&E plan shows a description of the activities that are related to each indicator measured in the M&E system
7. There are quality controls in place for when data from paper-based forms are entered into a computer (e.g., double entry, post-data entry verification, etc).
8. There are clear procedures for reviewing the quality of data (i.e., accuracy, completeness, timeliness and confidentiality) before submission of reports from the CPCU
9. All source documents and reporting forms relevant for measuring the indicators are archived for auditing purposes
10. There is a written back-up procedure for electronic data and information
Annex H: CPCU M&E capacity needs assessment

A questionnaire was sent to 24 KCSAP CPCUs. Responses were received from 23 CPCUs. The questionnaire covered

- the experience of M&E officers and 3 other staff (coordinators, statistics officers and research extension liaison officers),
- access to internet and vehicles,
- M&E activities of CTDs
- Perceived difficulty of different M&E tasks
- Perceived value of M&E training topics

H.1 Basic characteristics of KCSAP M&E officers

- About 80% of the 23 M&E officers have a bachelors degree, 20% have a master’s degree.
- About 80% of the 23 M&E officers have are men, only 5 are women.
- The average age is 42 years old
- 86% (i.e. 19) of M&E officers have previously worked in a donor project (mostly either WB or SIDA, but some with IFAD, EU, USAID or others).
- Of the 19 that had worked in a donor project, only 30% (6) had previously been employed as an M&E officer. But even if they had not been employed as M&E officer, about 70% had previously been involved in M&E activities in one of the donor projects they worked for.
- 13 out of 23 M&E officers have had previous training in M&E. The average training duration was 7.7 days. So more than 40% of M&E officers have not been trained in M&E, and most of the rest have received only short-term training.

H.2 Scoring of CPCU M&E capacity

Answers to questions about the experience of the M&E officer, experience of all 4 CPCU staff surveyed and about internet and vehicle access were scored using a method with a maximum possible score of 12.2.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Maximum possible score</th>
<th>% of total possible score (i.e. weighting of each topic in total score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past experience of M&amp;E officer</td>
<td>4</td>
<td>33%</td>
</tr>
<tr>
<td>Experience of 4 CPCU staff on specific M&amp;E tasks</td>
<td>5.2</td>
<td>43%</td>
</tr>
<tr>
<td>Access to internet and vehicle</td>
<td>3</td>
<td>25%</td>
</tr>
</tbody>
</table>
The 23 counties can be divided into 3 groups on the basis of their total scores. Not only does the total score for each group decrease from top to bottom tertile, but the average score for each of the topics decreases in the same way (except for vehicle access). This means that counties with good overall M&E capacity tend to have an M&E officer with more relevant donor project M&E experience and CPCU staff with more experience of specific M&E tasks. Conversely, counties with poor M&E capacity have M&E officers with less relevant experience, CPCU staff with less experience of M&E tasks and are likely to have more limited access to internet and vehicles. On the one hand, this means that capacity building can be most strongly targeted to CPCUs with lower capacity. On the other hand, it may mean that there are opportunities to share experience and strengthen M&E by using those counties that have stronger capacities.

<table>
<thead>
<tr>
<th>Group</th>
<th>Counties</th>
<th>Average score</th>
<th>M&amp;E Officer experience</th>
<th>4 CPCU staff M&amp;E task experience</th>
<th>Internet &amp; vehicle access</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top tertile</td>
<td>Garissa, Tana River, West Pokot, Siaya, Marsabit, Laikipia, Kisumu, Kakamega</td>
<td>2.75</td>
<td>4.5</td>
<td>1.1</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>Middle tertile</td>
<td>Lamu, Kericho, Taita Taveta, Kajiado, Elgeyo Marakwet, Wajir, Machakos, Busia</td>
<td>1.85</td>
<td>3.65</td>
<td>1.4</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>Bottom tertile</td>
<td>Bomet, Tharaka Nithi, Isiolo, Nyeri, Nyandarua, Uasin Gishu, Mandera, Baringo</td>
<td>1.71</td>
<td>2.43</td>
<td>0.5</td>
<td>4.7</td>
<td></td>
</tr>
</tbody>
</table>

H.3 CPCU staff experience and skills

The questionnaire asked whether the M&E officer, CPCU coordinator, statistics officer and research-extension liaison officer had previous training or work experience with 13 M&E tasks. If they did have either work experience or previous training on the task, a score of 0.1 was given. They were also asked to rate their own skill level (none or basic = 0; intermediate = 0.1, advance = 0.2, expert – 0.3).

A notable overall finding is that the average score for all 23 M&E officers was lower than the average score for CPCU coordinators and research-extension liaison officers. Therefore, in order to make use of available skills and experience, within CPCUs, M&E tasks should arranged to involve all the staff,
not just the M&E officer. The experience of other CPCU staff can also be used to raise the capacity of M&E officers.

<table>
<thead>
<tr>
<th>Group</th>
<th>Counties</th>
<th>Average score for work or training</th>
<th>Average score for self-appraised skill level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top tertile</td>
<td>Garissa, Tana River, West Pokot, Siaya, Marsabit, Laikipia, Kisumu, Kakamega</td>
<td>2.75 4.5 1.1 8.4</td>
<td>1.00 1.24 1.00 1.74</td>
</tr>
<tr>
<td>Middle tertile</td>
<td>Lamu, Kericho, Taita Taveta, Kajiado, Elgeyo Marakwet, Wajir, Machakos, Busia</td>
<td>1.85 3.65 1.4 6.9</td>
<td></td>
</tr>
<tr>
<td>Bottom tertile</td>
<td>Bomet, Tharaka Nithi, Isiolo, Nyeri, Nyandarua, Uasin Gishu, Mandera, Baringo</td>
<td>1.71 2.43 0.5 4.7</td>
<td></td>
</tr>
</tbody>
</table>

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**H.3.1 Skills in household surveys**

Average previous experience or training in specific tasks related to household surveys decrease from the top to the bottom tertile of CPCUs. For all CPCUs, there is very limited previous experience with using digital tablets for household surveys. For the bottom tertile in particular, experience with entering survey data in spreadsheets, checking data quality and analyzing survey results is much more limited than for the top or middle tertile. Bottom tertile CPCUs’ experience of conducting surveys and writing survey reports is also more limited than for the other CPCUs.

<table>
<thead>
<tr>
<th>Task</th>
<th>Average score of top tertile</th>
<th>Average score of middle tertile</th>
<th>Average score of bottom tertile*</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Conducting household surveys with paper survey forms</td>
<td>.788</td>
<td>.725</td>
<td>.583</td>
</tr>
<tr>
<td>b Conducting household surveys with questionnaires on digital tablets</td>
<td>.175</td>
<td>.150</td>
<td>.033</td>
</tr>
<tr>
<td>c Entering survey data in spreadsheets</td>
<td>.363</td>
<td>.313</td>
<td>.150</td>
</tr>
<tr>
<td>d Checking the quality of survey data</td>
<td>.350</td>
<td>.238</td>
<td>.100</td>
</tr>
<tr>
<td>e Analyzing household survey results</td>
<td>.325</td>
<td>.200</td>
<td>.133</td>
</tr>
<tr>
<td>f Writing technical reports (e.g. results of a household survey)</td>
<td>.400</td>
<td>.300</td>
<td>.267</td>
</tr>
</tbody>
</table>

*include only the 6 CPCUs that responded to the survey. NB: Full score for each skill = 0.400
**H.3.2 Skills in routine monitoring activities**

For most routine M&E tasks, experience and training is more for top tertile than for middle and bottom tertile. Experience of the bottom tertile is much lower than for other groups in all areas. The middle tertile has considerably less experience than the top tertile in monitoring project implementation by sub-contractors and service providers and using electronic PMIS.

<table>
<thead>
<tr>
<th></th>
<th>Average score of top tertile</th>
<th>Average score of middle tertile</th>
<th>Average score of bottom tertile*</th>
</tr>
</thead>
<tbody>
<tr>
<td>g</td>
<td>Conducting routine monitoring of project activities in the field</td>
<td>0.413</td>
<td>0.450</td>
</tr>
<tr>
<td>h</td>
<td>Monitoring project implementation by sub-contractors (e.g. contracted service providers or construction companies)</td>
<td>0.288</td>
<td>0.150</td>
</tr>
<tr>
<td>i</td>
<td>Facilitating participatory M&amp;E by community groups</td>
<td>0.350</td>
<td>0.300</td>
</tr>
<tr>
<td>j</td>
<td>Writing regular monitoring reports (e.g. monthly, quarterly or annual reports)</td>
<td>0.375</td>
<td>0.388</td>
</tr>
<tr>
<td>k</td>
<td>Using electronic project management information systems (MIS)</td>
<td>0.263</td>
<td>0.163</td>
</tr>
<tr>
<td>L</td>
<td>Planning annual work plans and budgets for project implementation</td>
<td>0.400</td>
<td>0.400</td>
</tr>
<tr>
<td>m</td>
<td>Budgeting for M&amp;E activities</td>
<td>0.325</td>
<td>0.325</td>
</tr>
</tbody>
</table>

*include only the 6 CPCUs that responded to the survey. NB: Full score for each skill = 0.400
**H.4 CPCU physical capacity for M&E**

Access to computers, internet and vehicles to enable M&E activities is limited in many counties. In particular, good quality internet access is limited. This will have to be addressed or ways around it will have to be considered in order to facilitate use of online databases and digital reporting. Not all CPCUs reported that the M&E officer has regular access to a vehicle, probably because procurement has not been completed in all counties.

<table>
<thead>
<tr>
<th></th>
<th>Top tertile</th>
<th>Middle tertile</th>
<th>Bottom tertile</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with a computer with internet access</td>
<td>38%</td>
<td>38%</td>
<td>0%</td>
</tr>
<tr>
<td>Good quality internet access always or sometimes</td>
<td>25%</td>
<td>63%</td>
<td>14%</td>
</tr>
<tr>
<td>No or very limited internet access</td>
<td>75%</td>
<td>37%</td>
<td>86%</td>
</tr>
<tr>
<td>Vehicle available for use always or mostly</td>
<td>63%</td>
<td>50%</td>
<td>43%</td>
</tr>
<tr>
<td>Vehicle rarely or not available for use</td>
<td>37%</td>
<td>50%</td>
<td>57%</td>
</tr>
</tbody>
</table>

**H.5 M&E capacities of CTDs**

In addition to CPCUs, the questionnaire asked about M&E in county CTDs (departments of agriculture, livestock and fisheries, irrigation, finance and economic planning, environment and natural resources and cooperative development. Overall, the majority of CTDs closely related to the project do not have an M&E unit staffed with a full-time M&E officer, and while most sometimes collect some data, few do so regularly. It is therefore likely that CDT staff capacities for M&E are also weak. Capacity building for CTD staff must be included in the capacity building plan.

<table>
<thead>
<tr>
<th>% with M&amp;E unit</th>
<th>% with full time staff</th>
<th>Frequency of data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Regularly</td>
</tr>
</tbody>
</table>


H.6 Perceived value of M&E training topics

When M&E Officers were asked about the M&E tasks they think will be challenging, the majority thought it would be easy or very easy to do only 4 of the 8 tasks listed. Significant proportions think that household surveys, monitoring service provision and managing databases will be difficult or very difficult, or they lacked the experience and understanding to judge. Differences between M&E officers in CPCUs scored in the top, middle and bottom tertiles were not clear.

In addition to the listed activities, one M&E Officer listed the following perceived challenges:

- Monitoring procurement outputs
- Fiduciary aspects of community grants

<table>
<thead>
<tr>
<th>Activity</th>
<th>Easy or very easy</th>
<th>Difficult, very difficult or don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting surveys of beneficiary households</td>
<td>0.45</td>
<td>0.23</td>
</tr>
<tr>
<td>Monitoring implementation of sub-grants to community organisations</td>
<td>0.50</td>
<td>0.18</td>
</tr>
<tr>
<td>Monitoring implementation of sub-grants implemented by CTDs</td>
<td>0.50</td>
<td>0.09</td>
</tr>
<tr>
<td>Monitoring service provision by private providers or CTDs to community groups</td>
<td>0.36</td>
<td>0.27</td>
</tr>
<tr>
<td>Writing regular (monthly or quarterly) progress reports</td>
<td>0.73</td>
<td>0.05</td>
</tr>
<tr>
<td>Checking that the quality of monitoring data is good</td>
<td>0.45</td>
<td>0.18</td>
</tr>
<tr>
<td>Managing monitoring data databases</td>
<td>0.27</td>
<td>0.32</td>
</tr>
<tr>
<td>Timely data aggregation and reporting to PCU</td>
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<td>0.14</td>
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</table>
When asked what types of training they thought would be valuable, almost all M&E officers thought almost all training would be valuable. The exception is for basic computer skills, where one third of respondents had a neutral or not positive attitude.

<table>
<thead>
<tr>
<th>% thinking the training would be</th>
<th>Very moderately valuable or</th>
<th>neutral</th>
<th>Low, little or no value</th>
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<tr>
<td>Basic concepts of M&amp;E</td>
<td>95%</td>
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<tr>
<td>Basic information about KCSAP project design</td>
<td>86%</td>
<td>4.5%</td>
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<td>CPCU roles and tasks in M&amp;E of KCSAP</td>
<td>91%</td>
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<tr>
<td>How to do annual planning and budgeting of project activities</td>
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<tr>
<td>How to plan and budget for M&amp;E activities</td>
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<td></td>
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<td>How to support participatory M&amp;E by community groups</td>
<td>100%</td>
<td></td>
<td></td>
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<tr>
<td>Skills for designing and implementing household surveys</td>
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<td></td>
<td></td>
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<tr>
<td>Methods for checking data quality</td>
<td>100%</td>
<td></td>
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<tr>
<td>Basic computer skills (e.g. how to use MS Office Word or Excel)</td>
<td>63%</td>
<td>14%</td>
<td>22%</td>
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<tr>
<td>How to manage M&amp;E databases</td>
<td>100%</td>
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<tr>
<td>How to write regular (e.g. monthly, quarterly) project reports</td>
<td>95%</td>
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<tr>
<td>How to facilitate review workshops to learn lessons for better project implementation</td>
<td>100%</td>
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</table>

In addition to the topics listed, M&E officers suggested a need for training in the following:

- Data collection and analysis (agricultural Information recording, documentation and reporting; SPSS; GPS and GIS for household surveys)
- Project planning and management, including proposal development & writing, Enterprise Development Plan planning:
- Communication: photography and success story documentation; video shooting and editing for success stories
- Leadership and management: Supervisory skills, senior management and strategic leadership.
- Professional content: value chain analysis; farmer/pastoral field school methodology; extension packages; environmental impact assessment; Nutrition mainstreaming; Community managed disaster risk reduction for NEDI counties

On the modalities for capacity building, the following were suggested:
• M&E officers should be trained as subject matter specialist since they will guide project implementation;
• Types of courses: short-courses; higher education (BSc, MSc, PhD); Senior Management Courses at the Kenya School of Government (KSG)
• M&E training should be for all CPCU technical staff so that they can assist during implementation
• Trainings for County Technical Departments staff is also key in Monitoring and Evaluation
• Training for community leaders to assist them in monitoring their projects/activities

H.7 Conclusions and recommendations

Key findings and recommendations include:

Experience and training of M&E Officers:

• Only 6 out of 23 M&E officers have previously worked in a donor project as M&E officer, but more than half have previously been involved in donor project M&E activities.
• 40% of M&E officers have never had training in M&E. Many of those that have report having received only short-term training. There is strong demand for training on a range of M&E-related topics
• M&E Officers have on average less experience and lower skills in M&E than project coordinators and research-extension liaison officers.

⇒ CPCUs should develop M&E work plans that Involve M&E officers together with other CPCU technical staff in conducting M&E activities. Allocation of roles should take advantage of other CPCU staff strengths, while also ensuring that each staff member is able to focus on the responsibilities within their respective docket.

⇒ Develop a programme of training for M&E officers and other CPCU staff.

M&E Training:

• Large proportions of M&E officers expect difficulty or have limited confidence about a range of M&E tasks, including household surveys, monitoring service provision, data quality checking and managing M&E databases.
• M&E officers think that training in almost any M&E related topic would be valuable.
• M&E training should also be for other CPCU staff, for staff of CTDs and for community members.

⇒ Identify the various tasks and skills that CPCU staff need to have to implement M&E activities, and develop a structured training course consisting of different modules that can be delivered over time.
Identify tasks and skill needs of CTDs and community members, and develop and deliver targeted training modules.

**Physical infrastructure for M&E:**

- The majority of CPCUs have access to computers with reliable internet access and vehicles for field monitoring visits.

Inventory CPCU computing infrastructure, connectivity and vehicle procurement needs, and ensure that CPCUs are well equipped.

Internet connectivity is likely to be a continuing issue in many CPCUs, so procedures for data management should not depend fully on internet access. E.g. when digital tablet survey tools are used and CPCUs enter data into the PMIS, ensure that data pre-processing and entry can be done off-line, so that only uploading requires internet access; or provide off-line templates for data entry that can be emailed to NPCU for uploading.

**Systemic capacities for M&E:**

- Scoring of CPCU capacities shows that, on average, CPCUs with stronger M&E officers also have other CPCU staff with more experience and better infrastructure. This means that weaker CPCUs are weaker in several dimensions. In addition to lacking specific skills, less experience of M&E among all CPCU staff likely implies that the overall management of M&E activities will be weaker.
- All regions of the country have at least 1 CPCU with strong M&E capacities.

Develop a systematic procedure for internal assessment of M&E performance that informs an ongoing programme of capacity support.

NPCU should target monitoring and ongoing support to weaker CPCUs.

Make use of CPCUs with stronger M&E experience to share experience and/or provide coaching to nearby CPCUs with weaker experience, e.g. by peer review and coaching on M&E management and planning procedures.

Document and share good experiences and lessons learned with M&E.

**Ranking of CPCUs by M&E capacity score**

<table>
<thead>
<tr>
<th>County</th>
<th>Rank</th>
<th>M&amp;E officer experience</th>
<th>CPCU staff M&amp;E task experience</th>
<th>Infrastructure for M&amp;E</th>
<th>Total score</th>
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*Due to lack of data from this county, we assume limited capacity, but this may not be the case in reality.
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