

**Climate-smart agriculture measuring and reporting in the United Republic of  
Tanzania**

**Annexes**

## Annex 1. Policies for CSA in Tanzania, annotated

Policy	Year of issue	Policy domain	Are activities promoted in the plan / relevant to CSA pillars?			Does the policy promote CSA measures as defined by the country?	Is the CSA concept mentioned ?	Does the policy/ program have an M&E system?	Is the plan or policy relevant to M&E of CSA, according to stakeholders?
			Productivity	Resilience	Mitigation				
<b>National Adaptation Programme of Action (NAPA)</b>	2007	Adaptation/ Resilience	YES	YES	NO	Not explicitly named as CSA, but as adaptation strategies which are prioritized and described in detail as future investment projects	NO	M&E Framework for adaptation actions developed under the Vice President Office (VPO) and to be implemented by the National Climate Change Focal Point (NCCFP), but no indicators publicly available; unclear how national and local institutions use it	NO
<b>National Climate Change Strategy (NCCS)</b>	2012	Climate resilience	YES	YES	YES	Not explicitly as CSA	NO	PARTIALLY: an action plan with indicators for tracking progress, with reports to be delivered by March each year by stakeholders. But no data collection strategy.	NO
<b>National Environmental Action Plan (NEAP) (2013-2018)</b>	2013	Environment; Climate change	NO	YES	YES	NO	NO	ACRP mentions the development of a monitoring framework that feeds into the Agriculture Routine Data System (ARDS), but no evidence of a framework.	NO
<b>Agriculture Climate Resilience Plan (ACRP) 2014–2019</b>	2014	Climate change; Risks; Agriculture development	YES	YES	YES	YES	YES	YES (the ASDP Results Framework). Information to be collected through ARDS, National Sample Census on Agriculture (NSCA), Annual Agriculture Sample Surveys (AASS) and Joint Sector Reviews (JSRs)	NO
<b>Agriculture Sector Development Strategy II (ASDS II) (2015/2016–2024/2025)</b>	2014	Agriculture development; Poverty reduction	YES	YES	NO	Not explicitly as CSA, but as measures with targets aligned to CAADP and linked to CSA outcomes	NO	NO	YES
<b>Intended Nationally Determined Contributions (INDC)</b>	2015	Resilience; Mitigation	YES	YES	YES	NO. The INDC lists only larger sectoral objectives, but no specific measures to achieve the desired contributions	NO	NO	NO

Policy	Year of issue	Policy domain	Are activities promoted in the plan / relevant to CSA pillars?			Does the policy promote CSA measures as defined by the country?	Is the CSA concept mentioned ?	Does the policy/ program have an M&E system?	Is the plan or policy relevant to M&E of CSA, according to stakeholders?
			Productivity	Resilience	Mitigation				
<b>Agriculture Sector Development Programme Phase II (ASDP II)</b>	2016	Agriculture development; Poverty reduction	YES	YES	NO	YES	Not explicitly, but implicitly through the objectives and measures promoted.	YES (ASDP II Results Framework and Monitoring), aligned to the Big Results Network (BRN) results tracking system. Sector outputs to be informed by the ARDS and specific reports. Sector outcomes to be monitored through the National Sample Census on Agriculture (NSCA), Annual Agriculture Sample Surveys (AASS) and/or the National Panel Survey (NPS) agriculture module. District performance (project level) to be informed by annual District Agricultural Development Plans (DADPs) Quality Assessment Reports.	YES
<b>Tanzania Climate Smart Agriculture Program 2015–2025</b>	2017	CSA	YES	YES	YES	YES, with specific targets (indicators)	YES	In plan (participatory monitoring & evaluation framework), but not yet developed	NO
<b>Climate Smart Agriculture Guideline</b>	2017	CSA	YES	YES	YES	YES	YES	YES. An M&E plan with objectives, clear performance indicators, data sources, collection methods, timeframe and responsibilities.	NO

Annex 2. Stakeholders' influence and interest in CSA M&E in Tanzania.

Influence on implementation of CSA framework	High	MoWI World Vision International	AGRA ANSAF CIAT MoA FAO ForumCC IFAD DFID Hombolo Research Center JICA MANRF MFAEAC MoFP MLFD MVIWATA NEMC NIRC Norwegian Aid PORALG Selian Research Center Sokoine University of Agriculture TCSAA TMA USAID VPO - DoE World Bank	
	Medium	ACT ARI Mikocheni CARMATEC CRS IITA IUCN MJUMITA Mlingano Uyole Research Center NCMC-SUA Oxfam TAFORI UNDP	CARE International EC NBS SAGCOT TFCG University of Dar es Salaam UNEP	
	Low	Conservation Farming Unit State House–Focal point for CC and Environment	CIMMYT Dalberg Global Development Advisors Open University of Tanzania	
		Low	Medium	High
		Level of interest in M&E of CSA		

Key for institutions:

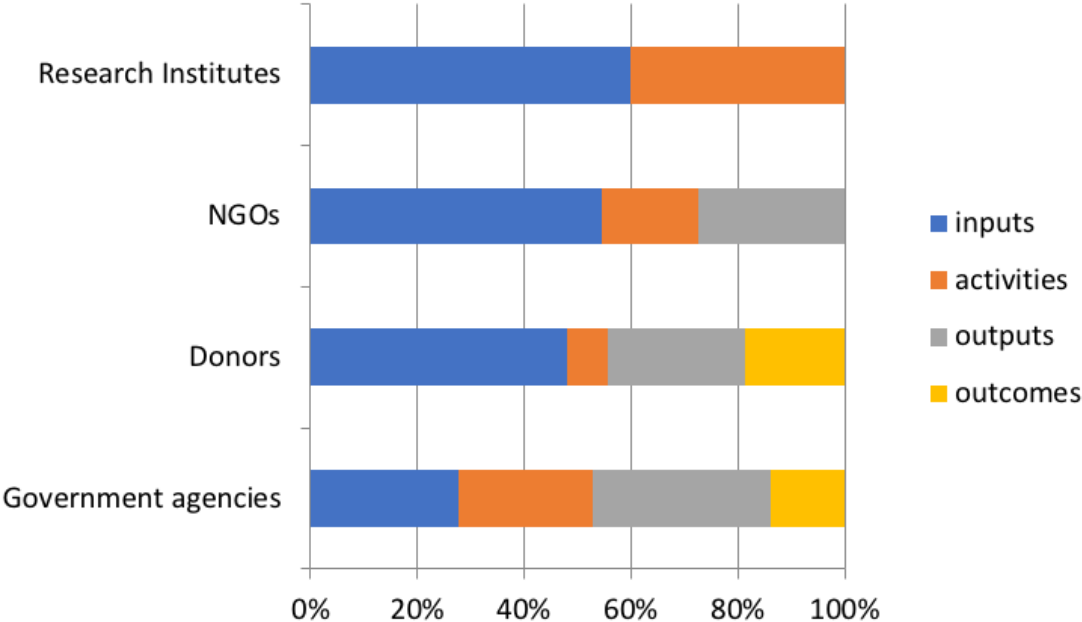
ACT	Agriculture Council of Tanzania
AGRA	Alliance for a Green Revolution in Africa
ANSAF	Agriculture Non-State Actors Forum
CARMATEC	Centre for Agricultural Mechanisation and Rural Technology
CIAT	International Center for Tropical Agriculture
CIMMYT	International Maize and Wheat Improvement Center
CRS	Catholic Relief Services
DFID	Department for International Development
EC	European Commission
FAO	Food and Agriculture Organization of the United Nations
ForumCC	Forum on Climate Change
IFAD	International fund for Agricultural Development
IITA	International Institute of Tropical Agriculture
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
MANRF	Ministry of Agriculture, Natural Resources, Livestock and Fisheries
MLFD	Ministry of Livestock and Fisheries Development
MFAEAC	Minister of Foreign Affairs and East African Cooperation
MJUMITA	Mtandao wa Jamii wa Usimamizi wa Misititu Tanzania
MoA	Ministry of Agriculture
MoWI	Ministry of Water and Irrigation
MoFP	Ministry of Finance and Planning
MVIWATA	Mtandao wa Vikundi vya Wakulima Tanzania
NBS	National Bureau of Statistics
NCMC-SUA	National Carbon Monitoring Centre– Sokoine University of Agriculture
NEMC	National Environment Management Council
NIRC	National Irrigation Commission
PORALG	President’s Office–Regional Administration and Local Governments
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
TAFORI	Tanzania Forestry Research Institute
TCSAA	Tanzania Climate Smart Agriculture Alliance
TFCG	Tanzania Forest Conservation Group
TMA	Tanzania Meteorological Agency
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
VPO–DoE	Vice President Office – Division of Environment

### Annex 3. Stakeholders' roles and interest in CSA

Institutions	Roles in CSA support or implementation		Roles in CSA M&E	
	<ul style="list-style-type: none"> <li>■ sets CSA policies/plans</li> <li>■ implements CSA policies/plans</li> <li>■ ensures finance for implementation of CSA framework</li> <li>■ coordinates CSA stakeholders</li> <li>■ shares CSA knowledge &amp; info</li> <li>■ other</li> </ul>		<ul style="list-style-type: none"> <li>■ data collection</li> <li>■ data mgmt. &amp; analysis</li> <li>■ reporting</li> <li>■ info dissemination</li> <li>■ user of reported info</li> </ul>	
Ministry of Agriculture–ASDP M&E Thematic Working Group (M&E TWG)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Ministry of Agriculture–Environment Management Unit (EMU)	No information		No information	
Ministry of Agriculture–Policy Unit	No information		No information	
Ministry Livestock and Fisheries	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Ministry of Foreign Affairs and East Africa Cooperation	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Vice President’s Office, Division of Environment	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Ministry of Finance and Planning	■ ■		■ ■ ■ ■ ■	
President’s Office–Regional Administration and Local Governments (PORALG)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
State House–Focal point for Climate Change and Environment	■ Oversees CSA implementation		■ ■ ■ ■ ■	
Ministry of Agriculture, Natural Resources, Livestock and Fisheries (Zanzibar)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Tanzania Meteorological Agency (TMA)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Ministry of Water and Irrigation (MoWI)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
National Environment Management Council (NEMC)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
National Irrigation Commission (NIRC)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
National Carbon Monitoring Centre (NCCM–SUA)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Centre for Agricultural Mechanisation and Rural Technology (CARMATEC)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Tanzania Forestry Research Institute (TAFORI)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
National Bureau of Statistics (NBS)	■ Creates database/baseline for evaluating CSA		■ ■ ■ ■ ■	
Food and Agriculture Organization of the United Nations (FAO–Tanzania)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
United Nations Environment Programme (UNEP)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
International fund for Agricultural Development (IFAD)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
International Union for Conservation of Nature (IUCN)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
Department for International Development (DFID)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
World Bank	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
United States Agency for International Development (USAID)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	
United Nations Development Programme (UNDP)	■ ■ ■ ■ ■		■ ■ ■ ■ ■	

Institutions	Roles in CSA support or implementation		Roles in CSA M&E	
	sets CSA policies/plans	implements CSA policies/plans	data collection	data mgmt. & analysis
Norwegian Aid	■	■	■	■
European Commission (EC)	■	■	■	■
Japan International Cooperation Agency (JICA)	■	■	■	■
Sokoine University of Agriculture	■	■	■	■
University of Dar es Salaam	■	■	■	■
Open University of Tanzania	■	■	■	■
Selian Research Center	■	■	■	■
Mlingano	■	■	■	■
Uyole Research Center	■	■	■	■
ARI Mikocheni	■	■	■	■
Hombolo Research Center	■	■	■	■
International Maize and Wheat Improvement Center (CIMMYT)	■	■	■	■
International Institute of Tropical Agriculture (IITA)	■	■	■	■
CARE International	■	■	■	■
Conservation Farming Unit–Tanzania	■	■	■	■
Oxfam	■	■	■	■
Catholic Relief Services (CRS)	■	■	■	■
Tanzania Forest Conservation Group (TFCG)	■	■	■	■
Forum on Climate Change (ForumCC)	■	■	■	■
World Vision International	■	■	■	■
Agriculture Council of Tanzania (ACT)	■	■	■	■
Agriculture Non-State Actors Forum (ANSAF)	■	■	■	■
Southern Agricultural Growth Corridor of Tanzania (SAGCOT)	■	■	■	■
Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania (MJUMITA)	■	■	■	■
Alliance for a Green Revolution in Africa (AGRA)	■	■	■	■
Mtandao wa Vikundi vya Wakulima (MVIWATA)	■	■	■	■
Tanzania Climate Smart Agriculture Alliance (TCSAA)	■	■	■	■
DALBERG	■	■	■	■
International Center for Tropical Agriculture (CIAT)	■	■	■	■

Different stakeholders' M&E needs categorized according to a results framework





#### Annex 4. Stakeholders' needs identified through interviews

Stakeholder	Indicator (information need)	How does / would the stakeholder use this information?	Can the stakeholder get this information from existing M&E systems? (fully; partially; not at all)	If the stakeholders can fully or partially get the information, from what M&E system can they get it?	If only partially or not at all, is there an M&E system that could be adapted to provide this information?
<b>Alliance for a Green Revolution in Africa (AGRA)</b>	CSA technologies/ techniques to be promoted among farmers	Promotion and scaling of CSA among farmers	Not at all. Own M&E targets only on yield, number of famers, production but not on CSA	AGRA Management and Information System (AMIS)	
	CSA stakeholders (type, number)	To build partnerships	Not at all	AMIS	
<b>Agriculture Non-State Actors Forum (ANSAF)</b>	Contribution of CSA to meeting interests and needs of smallholder producers (farmers and livestock keepers)	To enhance inclusivity and coordination of the CSA initiatives	Partially. Only uses Sustainable Agriculture Intensification Research and Learning in Africa (SAIRLA) and Social Accountability Monitoring (SAM)	SAIRLA, SAM Reports	Comprehensive Africa Agriculture Development Programme (CAADP) Tracking, Joint Sector Review (JSR)
	Policy coherence measures for CSA implementation	To avoid policy barriers which disempower smallholder producers	Yes, fully. Undertake Policy analysis and dialogues	CAADP Non-State Actors (NSAs) Coordination Platform for Agricultural Policy Analysis and Coordination–MoA)	
<b>Department for International Development (DFID)</b>	Contribution of CSA to poverty alleviation	Track support of DFID on ending poverty in the country	No information	No	FAO M&E system
	Uptake rate of the CSA practices	Understanding funding potential or need of funding	No information	No	FAO M&E system
	CSA stakeholders (type, number)	Design of programmes and projects	No information	No	FAO M&E system
	Gender mainstreaming in CSA activities	Design of programmes and projects	No information	No	FAO M&E system
	The role of CSA in agriculture development	Design of programmes and projects	No information	No	FAO M&E system
	Percentage of agriculture activities considered CSA	Design of programmes and projects	No information	No	FAO M&E system
	Sustainability of CSA activities	For decision-making support and accountability	No information	No	FAO M&E system
	Contribution of CSA to early warning systems	Addressing food security	No information	No	FAO M&E system

Stakeholder	Indicator (information need)	How does / would the stakeholder use this information?	Can the stakeholder get this information from existing M&E systems? (fully; partially; not at all)	If the stakeholders can fully or partially get the information, from what M&E system can they get it?	If only partially or not at all, is there an M&E system that could be adapted to provide this information?
<b>National Bureau of Statistics (NBS)</b>	CSA practices and technologies used in Tanzania	For upscaling purposes in relevant areas	Partially. Farmer field school global platform (not a system)	Project M&E framework responding to country programming framework	
	Implementation of CSA practices (where these are promoted)	Build synergies and avoid duplication	Partially	Interactions with stakeholders	Online mapping of CSA activities
	Adoption rate of CSA practices	To measure value for money of a practice; Understand transformational changes and needs for further investments	Partially, at project level and not at country level	Through monitoring of project implementation progress	Field Programme Integrated Management System (FPIMS)
	Existing funding for CSA practices	Investment planning	Partially	Interaction, meeting and workshops	FPIMS
	CSA stakeholders (types, number)	Building partnerships	Partially	Interactions with stakeholders	
	Government partnerships with CSA stakeholders	To support project and program design for snowball effect	Partially	Interaction	Harmonized and affordable database
	Existing partnerships for CSA promotion in livestock, fisheries, crop and forestry (Mainland, Zanzibar)	For strategic planning and for partnership	Partially	Interaction	
<b>Forum Climate Change (ForumCC)</b>	CSA stakeholders at different levels	Build partnerships for technology dissemination and on-ground information monitoring	Partially. Forum CC can reach to some stakeholders		Tanzania Climate Smart Agriculture Alliance (TCSAA) stakeholder registration forms
	CSA activities carried out by stakeholders	To avoid social, economic and climate inequalities and projects overlaps	Partially		
	Information channels from central to local government (who informs who)	Track dissemination of CSA practices	No information		
	Extent to which CSA informs local government plans	Tailoring investments to local needs	No information		

Stakeholder	Indicator (information need)	How does / would the stakeholder use this information?	Can the stakeholder get this information from existing M&E systems? (fully; partially; not at all)	If the stakeholders can fully or partially get the information, from what M&E system can they get it?	If only partially or not at all, is there an M&E system that could be adapted to provide this information?	
	Mainstreaming CSA in the local government level plans	Track implementation of CSA at local level	Not at all			
	CSA financing in the country	Track level of CSA financing, identify financing opportunities	Partially		CSA code in the Medium-Term Expenditure Framework (MTEF)	
<b>Hombolo Agriculture Research Institute</b>	Funding potential for CSA research	Development, validation and upscaling of CSA practices and technologies	Not at all	No		
	Evidence-based CSA practices in different agro-ecological zones (AEZs)	Promotion of locally-relevant CSA practices and technologies	Not at all	No		
	Access to information on CSA practices and technologies	Use on the formulation of research and setting up of hypothesis in research	Internet search, workshops, trainings and personal contacts		No	
	Number of publications on CSA focusing on different AEZs	To leverage some of the best bet practices to similar AEZs	Not at all		No	
	CSA stakeholders at country level	Share lessons learned on CSA, build partnerships to promote practices and technologies	Not at all		No	
<b>International Fund for Agricultural Development (IFAD)</b>	Biophysical and social baseline conditions in a project area	To track impact of project and status of natural resources	Partially	Field report and consultancy	Results and Impact Management System (RIMS)	
	Contribution of CSA adoption to behavioral change	To track impact of project and status of natural resources	No information	Field report and consultancy	RIMS	
	Dissemination channels for agrometeorological services and impacts on stakeholders	Understand whether activity is responding to the need or not	No information	Field report and consultancy	RIMS	
<b>Japan International Cooperation Agency (JICA)</b>	Newly irrigated areas	Report to headquarters; assess project impact	Fully	Requesting	Agricultural Routine Data System (ARDS)	
	Productivity of rice in irrigation schemes	Report to headquarters; assess project impact	Partially	ARDS	ARDS	
	Collection of water use fee by farmers	Report to headquarters; assess project impact	Partially	NIRC Annual system	No recommendation	

Stakeholder	Indicator (information need)	How does / would the stakeholder use this information?	Can the stakeholder get this information from existing M&E systems? (fully; partially; not at all)	If the stakeholders can fully or partially get the information, from what M&E system can they get it?	If only partially or not at all, is there an M&E system that could be adapted to provide this information?
	Income derived from farming activities	Report to headquarters; assess project impact	Partially	Survey	-
	Production quantity (crops)	Report to headquarters; assess project impact	Fully	ARDS	ARDS
<b>Ministry of Agriculture (MoA)</b>	Budget disbursed for CSA activities at the district level	To track allocation of CSA finance	Not at all	ARDS	ARDS
	CSA practices and technologies adopted by farmers at district level	Track CSA practices and technologies streamlined in the District Agricultural Development Plans (DADPS)	Not at all	ARDS	ARDS
	Contribution of CSA practices and technologies on improvement of food security	Evidence-based assessment of CSA impact	Fully from ARDS	ARDS	ARDS
	Contribution of CSA on improving climate resilience	Evidence-based assessment of CSA impact	Not at all	ARDS	ARDS
	Contribution of CSA to enhanced adaptation through carbon sequestration	Evidence-based assessment of CSA impact	Not at all	ARDS	ARDS
	Awareness and dissemination of CSA practices at district level	Track use of CSA practices and technologies by stakeholders	No information		
<b>Ministry of Agriculture Natural Resource and Livestock and Fisheries (MANRLF)</b>	Contribution of CSA to productivity (compared against conventional agriculture)	Evidence-based assessment of CSA impact	Partially	Visit and technical report	geographic information system (GIS)
	Adoption rate of CSA practices and technologies	Identify scaling needs	Partially	Extension agents, surveys and projects	Data management strategy
	Types of CSA practices implemented in different AEZs	Identify further investment needs	Partially depends on circumstance and not zones	Through studies	Data management strategy
	Types of crops used in different AEZs	Identify CSA potential in different agro-ecological zones	Fully	AEZ mapping and crop calendars	
	Animal breeds used in different AEZs	Identify need of animal breeds based on location	Fully	Livestock policy identifies type of animal and zones	
	Change in fishing distance due to climate change	Track economic gain and resource use efficacy	No, depends on behavioral patterns of the fisherman		Global Positioning System (GPS)

Stakeholder	Indicator (information need)	How does / would the stakeholder use this information?	Can the stakeholder get this information from existing M&E systems? (fully; partially; not at all)	If the stakeholders can fully or partially get the information, from what M&E system can they get it?	If only partially or not at all, is there an M&E system that could be adapted to provide this information?
	Fuel use for fishing activities due to distance change	Track economic gain and resource use efficacy	No		GPS
	Types of vessels used in fishing activities (modern, traditional)	Understand fishing capacity	Fully	Fisherman registration data log	
	Climate change impact on seaweed farming and ocean productivity	Track planting season and monitor biodiversity in the ocean	Partially	Farmers and fisheries officer report	Seaweed and ocean productivity correlated with weather information
	Number of farmers practicing aquaculture (disaggregated by gender)	Promotion of diversification of economic activities and gender equity	Fully	Experts' reports	GPS system is in progress
	Number of farmers practicing bee keeping activities and productivity	Promotion of diversification of economic activities; enhance ecosystem function	Fully	Register beekeepers at the beekeepers' association	
<b>Ministry of Finance and Planning (MoFP)</b>	CSA Funds flowing into the country	Facilitate the tracking of climate change inflows for informing economic and fiscal policies	If these funds are channeled through the budget system, they can be tracked through the budget.	Budget monitoring and control mechanism;	MTEF
	CSA Projects implemented in the country	To assess economic impacts so as to inform GDP computations; to assess the social impact of CSA projects (in terms of reducing poverty income to farmers)	The government developed the Poverty Monitoring System (PMS) for 2016/17–2021 that has a set of economic development indicators which could be used for monitoring these impacts (p. 43 of the PMS).	The PMS 2016/17–2020/2021; FYDP2016/17–2021	Poverty Monitoring System (PMS), Tanzania Socioeconomic Database (TSED), Five-Year Development Plan (FYDP)
	Impacts of CSA on agriculture sector resilience and contribution to GHG mitigation	Evidence-based assessment of CSA impact	The PMS has not been implemented fully, yet the environmental sustainability indicators can be used for monitoring these impacts; The VPO Climate Change Adaptation M&E framework (not yet operationalized) can also be used.	The PMS 2016/17–2020/2021; a Framework for Climate Change Adaptation M&E Framework	Climate Change Adaptation M&E framework in 2012

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<b>Mtandao wa Vikundi vya Wakulima Tanzania (MVIWATA)</b>	CSA strategies currently in use by small-scale farmers	Informing investments	Partially: from different MVIWATA publications and reports	From various MVIWATA publications/reports	Reports and small-scale farmers networks in villages
	Potential practices/ strategies that could be implemented by small-scale farmers	Scaling CSA	Partially: from projects' reports that MVIWATA implemented in Kyela, Ludewa and Kilosa districts in collaboration with other partners	From project-specific M&E tools	Improvement of tools to enable a clear picture and easy tracking of CSA adoption
	Identification of successful CSA strategies that could fit the context of small-scale farmers in Tanzania	Scaling of locally-relevant CSA solutions	Partially: from small-scale farmers CSA experiences in the countryside	From farmers' groups, networks and monitoring visits.	Farmer groups meetings and CSA monitoring visits (bottom-up approach)
<b>NBS</b>	Number of district councils promoting CSA initiatives in the country	Informing policy and programming	Not at all	No	ARDS
	Percentage of public budget allocated for CSA	To track government's commitment to finance CSA	Not at all	No	ARDS
<b>National Environment Management Council (NEMC)</b>	Number of projects practicing CSA	Informing policy and programming	Not at all. No clear communication on the existing list of CSA projects	Some environmental projects use on-field monitoring	MoA to take the lead
	Number of environmental impact assessment (EIA) projects	To mainstream the use of EIA; advise on environment audit	Not at all. NEMC doesn't have report on number of EIA projects	Physical monitoring	-
	Number of farmers practicing CSA	Scale CSA investments	Not at all		On-field monitoring
	Type and number of existing government incentives for CSA uptake by farmers	Report to higher-level authorities	Not at all		VPO-DoE to provide this information
	Number of awareness programmes on CSA	Measure effectiveness of interventions	No information		
	Major constraints to adopting CSA	Report to higher-level authorities	Not at all		Use of respective ministry/authorities

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	Major challenges on CSA	Report to higher-level authorities	Not at all. NEMC does not have an M&E system to collect information on CSA.		Respective authorities to provide the information
<b>National Irrigation Commission (NIRC)</b>	Water availability in potential irrigation areas	To plan and design irrigation schemes; To select crops to grow, design cropping calendar, the water distribution schedule	There is no integrated M&E system; information is collected in MS–Excel sheets; also, some information is collected from other sectors’ M&E systems (MoA, MoWI, TMA)	NA	ARDS
	Number and type of water-serving irrigation technologies and methods	Improvement of water-use efficiency	There is no integrated M&E system; information is collected in MS–Excel sheets; also, some information is collected from other sectors’ M&E systems (MoA, MoWI, TMA)	NA	ARDS
	Area under irrigation (h)a	Planning of irrigation development	There is no integrated M&E system; information is collected in MS–Excel sheets; also, some information is collected from other sectors’ M&E systems (MoA, MoWI, TMA)		ARDS
	Number of irrigators	Planning and designing of irrigation schemes; land ownership and allocation	There is no integrated M&E system; information is collected in MS–Excel sheets; also, some information is collected from other sectors’ M&E systems (MoA, MoWI, TMA)		ARDS
	Climatic parameters	To plan and design irrigation schemes; to estimate crop water requirement; to identify favorable environment conditions for crop production	There is no integrated M&E system; information is collected in MS–Excel sheets; also, some information is collected from other sectors’ M&E systems (MoA, MoWI, TMA)		ARDS
<b>President’s Office–Regional Administration</b>	Number of Local Government Authorities (LGAs) implementing CSA projects	Design strategies to cover as much LGAs as possible	Not at all		ARDS

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and Local Governments (PORALG)	Number and type of CSA projects implemented in LGAs	Propose suitable resilience measures	Partially; the existing ARDS system covers information in irrigation projects (which are related to CSA)	ARDS	ARDS
	Source and amount of funding for CSA projects used by LGAs (source of funding, amount)	Identify and develop partnerships for financing CSA.	Not at all		ARDS
	Number of farmers adopting (CSA) resilience measures	Take stock of and scale efforts to improve farm resilience	Not at all		ARDS
Tanzania Meteorological Agency (TMA)	Number of farmers using climatological information for adopting CSA practices, by district	To track the use of climate information for climate change adaptation by farmers and livestock keepers	Partially. They are not well known and there is no documentation	-	Integrating ARDS in TMA M&E system
	Number of farmers using seasonal forecasts for planning and implementing CSA practices, by season and district	To track the use of climate information in climate-change adaptation by farmers and livestock keepers	No information		Integrating ARDS in TMA M&E system
	Number of farmers using short-term forecasts for planning agricultural activities (fertilizer applications), by season and district	To assess effectiveness of weather forecasts for scheduling activities (mitigation of farming risks related to intra-seasonal rainfall variability)	Partially. They are not well known and there is no documentation. The current system does not capture well this information. Also, data collection centers are few.		Integrating ARDS in TMA M&E system
USAID	Methods for selecting and prioritizing CSA practices	To assess quality, equity and representativeness of data	Partially	Internal reviews and public comments	
	Stakeholders involved in CSA decision-making	Inform programming	No information		
	CSA Practices prioritized and promoted	Inform programming	No information		
	CSA practices adopted (type, place)	Inform programming	No information		
	Number of people trained on CSA practices	Inform programming	No information		
	Impact assessment of CSA projects	Inform programming	No information		



Stakeholder	Indicator (information need)	How does / would the stakeholder use this information?	Can the stakeholder get this information from existing M&E systems? (fully; partially; not at all)	If the stakeholders can fully or partially get the information, from what M&E system can they get it?	If only partially or not at all, is there an M&E system that could be adapted to provide this information?
World Bank	Baseline situation on CSA in the country		No information	Implementation support missions by Word Bank	
	CSA promotion through ASDP II		No information	Implementation support missions by Word Bank	
	Sustainability and compliance with environmental and social safeguards in CSA projects		No information	Implementation support missions by Word Bank	
	Water-use efficiency in agriculture (irrigation)		No information	Implementation support missions by Word Bank	
	Engagement of the private sector in promoting CSA		No information		

## Annex 5. Indicators at multiple levels

No.	Reporting level	M&E Plan	Indicator
1	National	Agriculture Sector Development Programme (ASDP II)	Agricultural growth rate
2	National	ASDP II	% of rural population below the poverty line
3	National	ASDP II	% growth of agricultural exports (and breakdown by major commodity)
4	National	ASDP II	Average annual yield of maize (harvested)
5	National	ASDP II	Average annual yield of paddy (harvested)
6	National	ASDP II	Average annual yield of sunflower (Mt/ha harvested)
7	National	ASDP II	Average annual yield of milk
8	National	ASDP II	Average annual yield of meat
9	National	ASDP II	% increase in farmers' income from 143 crop, livestock and fish (by class, gender)
10	National	ASDP II	Average share of consumer price kept by farmer for maize
11	National	ASDP II	Average share of consumer price kept by farmer for rice
12	National	ASDP II	Average share of consumer price kept by farmer for milk/meat
13	National	ASDP II	Average production of milk (liter/cow/day)–traditional
14	National	ASDP II	Average production of Milk (liter/cow/day)–improved
15	National	ASDP II	Average price of live cattle
16	National	ASDP II	Average price of live goat & sheep
17	National	ASDP II	Average price of live chicken
18	National	ASDP II	Average price of live pig
19	National	ASDP II	Total annual production of maize
20	National	ASDP II	Total annual production of Paddy
21	National	ASDP II	Total annual production of milk
22	National	ASDP II	Total annual production of beef
23	National	ASDP II	Total annual production of goat meat
24	National	ASDP II	Total annual production of mutton
25	National	ASDP II	Total annual production of pork
26	National	ASDP II	Total annual production of chicken meat
27	National	ASDP II	Volume of rice imported (five-year average statistics)
28	National	ASDP II	Volume maize exported (five-year average statistics)
29	National	ASDP II	% of females directly benefiting from programme
30	National	ASDP II	% average household dietary score (count of different food groups that household consumed over preceding 24 hours)
31	National	ASDP II	Additional area under (improved) irrigation
32	National	ASDP II	Average returns to irrigation investment
33	National	ASDP II	Number of irrigation schemes managed by irrigator organizations
34	National	ASDP II	Increase in irrigators' contribution to infrastructure maintenance
35	National	ASDP II	% of supported WUA/IO that recover their O&M costs
36	National	ASDP II	Number of water points for livestock

37	National	ASDP II	Fish farming (number of ponds)
38	National	ASDP II	Average area per pond
39	National	ASDP II	% area under improved pasture access in dry season
40	National	ASDP II	Number of farmers practising conservation farming
41	National	ASDP II	Number of farmers practising integrated soil fertility management
42	National	ASDP II	Diversification of integrated farming systems
43	National	ASDP II	Area under runoff water collection and management
44	National	ASDP II	% increase in area under improved seed (% of area planted with use of improved technology disaggregated)
45	National	ASDP II	% increase in area under fertilizer application (% of sampled area under fertilizer application)
46	National	ASDP II	Number of improved paddy varieties released and (%) adopted by farmers
47	National	ASDP II	Number of improved maize varieties released and (%) adopted by farmers
48	National	ASDP II	Number of improved sunflower varieties released and (%) adopted by farmers
49	National	ASDP II	Number of trial farms
50	National	ASDP II	Number of technologies developed and disseminated
51	National	ASDP II	Number of trained extension staff
52	National	ASDP II	Farmer adoption rates (by major commodity)
53	National	ASDP II	Number of Ward Resource Centres established
54	National	ASDP II	Number of Ward Resource Centres facilitated
55	National	ASDP II	Increased number of village/ward extension staff
56	National	ASDP II	% of private extension service providers providing advisory service
57	National	ASDP II	Average incomes for maize growers who adopted technologies through (farmer field schools) FFS
58	National	ASDP II	Average incomes for rice growers who adopted technologies through FFS
59	National	ASDP II	Increased residential houses for village/ward extension staff
60	National	ASDP II	Provision of transport facilities (motorcycle) to village/ward extension staff
61	National	ASDP II	% farmers purchasing improved seeds
62	National	ASDP II	% farmers purchasing fertilizer
63	National	ASDP II	% farmers purchasing insecticide/fungicide
64	National	ASDP II	% farmers practicing artificial Insemination services
65	National	ASDP II	% of households using inputs (improved seeds, fertilizers, agrochemicals, improved tools, feed supplements for dairy cattle, etc.)
66	National	ASDP II	% of households accessing mechanization services through tractor and power tiller technologies
67	National	ASDP II	% of households accessing mechanization services through animal traction technologies
68	National	ASDP II	% of households/farmers with access to processing facilities for priority commodity value chain through grain milling machines
69	National	ASDP II	% of households/farmers with access to processing facilities for priority commodity value chain through oil milling machines
70	National	ASDP II	% of households/farmers with access to processing facilities for priority commodity value chain through fruits and vegetable machines
71	National	ASDP II	% of households/farmers with access to processing facilities for priority commodity value chain through roots and tubers machines

72	National	ASDP II	% of supported farmer organizations (FOs) that generate 50% of their revenues from membership fees
73	National	ASDP II	% of farmers groups with access to FO trade facilitation services
74	National	ASDP II	Number of farmers groups linked with markets
75	National	ASDP II	Number of operational warehouse receipt systems linked with local, regional and international markets
76	National	ASDP II	Number of regional and international trade contracts linked to WHRS
77	National	ASDP II	Share of production marketed by household/farmer (%)
78	National	ASDP II	% increase in gross margin per ha for: i) maize, ii) rice, iii) etc.
79	National	ASDP II	Number of public-private-producer partnerships established and operational (by value chain)
80	National	ASDP II	Number of emerging agroprocessing firms
81	National	ASDP II	Number of farmers using warehouse/storage facilities for marketing
82	National	ASDP II	Share of price received by farmers selling through warehouse compared to non-warehouse users
83	National	ASDP II	% of farmers who access agricultural market information
84	National	ASDP II	% of farmer groups
85	National	ASDP II	Number of improved priority policies and regulations formulated, approved, operationalized
86	National	ASDP II	Food self-sufficiency ratio (Ratio, <100, deficit; between 100 and 119, self-sufficient; above 120, surplus)
87	National	ASDP II	Number of unique foods consumed by members of household
88	National	ASDP II	% compliance with enhanced food quality and safety standards (% residuals)
89	National	ASDP II	Stunting rate (% of deficiency of important vitamins and minerals)
90	National	ASDP II	Results-based performance, participant & accountability by key actors of sector
91	National	ASDP II	% DADP that meet revised assessment criteria % DADP which have a results framework (or at least for ag. sector)
92	National	ASDP II	% submission of reports from LGA on quarterly basis for ASDP use
93	National	ASDP II	Number of DADPs quarterly and financial progress reports submitted on time
94	National	ASDP II	Number of Annual Agricultural Statistics Service (AASS) implemented annually and results available within three months
95	National	ASDP II	M&E systems established and operational: national level, subnational level
96	National	ASDP II	% of LGAs that provide reports (data) through ARDS Local government monitoring database-2 (LGMD2) on time
97	National	ASDP II	% of M&E framework shortlisted indicators updated with reliable data in a timely manner
98	National	ASDP II	Number of staff trained in various skills.
99	National	ASDS II	Additional area under (improved) irrigation
100	National	ASDS II	Cropping intensity for irrigated crops (rice, horticulture)
101	National	ASDS II	Number of water points for livestock
102	National	ASDS II	Number of fish ponds under aquaculture
103	National	ASDS II	% of land under land use plan
104	National	ASDS II	Ha of improved pasture/management
105	National	ASDS II	Measures of land degradation, deforestation, correct use of agrochemicals, water use, etc.

106	National	ASDS II	% farmers adopted integrate soil management methods
107	National	ASDS II	% of farmers adopting climate adaptation methods (drought resistant)
108	National	ASDS II	Diversification of integrated farming systems
109	National	ASDS II	Agricultural sector GDP growth rate (including rural GDP per capita)
110	National	ASDS II	Total Factor Productivity of the agricultural sector
111	National	ASDS II	Value of production per unit of land and labour
112	National	ASDS II	Average annual yields for priority crops
113	National	ASDS II	Total annual production
114	National	ASDS II	Productivity of smallholder subsector relative to commercial
115	National	ASDS II	Number of smallholders engaged in commercial farming
116	National	ASDS II	Number of enterprises engaged in high value activities along value chain
117	National	ASDS II	Net value added attributable to the agricultural sector
118	National	ASDS II	Number of people employed in off-farm rural enterprises
119	National	ASDS II	Number of businesses and people employed in rural agro-industries (including biofuels)
120	National	ASDS II	Gross margin per labour day
121	National	ASDS II	Amount of production from commercial subsector
122	National	ASDS II	Farmers engaged in research prioritization and on-farm adaptive trials
123	National	ASDS II	% of farmers visited by extension workers
124	National	ASDS II	% of farmers satisfied by extension service
125	National	ASDS II	Increased rates of technology adoption
126	National	ASDS II	% of farmers using improved seed and fertilizer
127	National	ASDS II	Area under improved technology
128	National	ASDS II	% of livestock keepers accessing artificial insemination
129	National	ASDS II	% of fish farmers accessing fingerlings
130	National	ASDS II	% of crop area mechanized
131	National	ASDS II	% farmers adopting mechanization
132	National	ASDS II	% of farmers enrolled in farmers' organization
133	National	ASDS II	% of farmers accessing services in their organizations
134	National	ASDS II	Volume and % of crops marketed through farmer organization
135	National	ASDS II	% organizations improved in the governance index
136	National	ASDS II	Number of private stakeholders active in rural commercial enterprises
137	National	ASDS II	Foreign direct investment (FDI) flow to agricultural sector
138	National	ASDS II	Number and value of new investment in agriculture
139	National	ASDS II	% of crops/livestock produce processed (value added)
140	National	ASDS II	Number of new jobs created in the agribusiness
141	National	ASDS II	Real farm-gate prices reported by farmers
142	National	ASDS II	Volume and value of exports
143	National	ASDS II	Domestic market share
144	National	ASDS II	Number of smallholders actively engaged in rural markets
145	National	ASDS II	Certification of commodities for export

146	National	ASDS II	Market share of domestic food items in supermarkets
147	National	ASDS II	Terms of trade for agricultural commodities (ratio between prices of outputs and inputs)
148	National	ASDS II	% of crops marketed
149	National	ASDS II	% of farmers selling surplus to the market
150	National	ASDS II	% change in marketable surplus for priority value chain
151	National	ASDS II	% increase in gross margin per ha
152	National	ASDS II	Number of market linkages established
153	National	ASDS II	% of farmers accessing formal financial services
154	National	ASDS II	% of lending by financial sector going to agricultural sector
155	National	ASDS II	All sectoral ministries and institutions working towards agreed ASDS objectives
156	National	ASDS II	Harmonization of all development initiatives in the sector within the ASDS framework
157	National	ASDS II	Need for appropriate balance between capital and recurrent budget allocations
158	National	ASDS II	Enhance capacity to monitor and evaluate at sectoral level
159	National	ASDS II	Leadership, management and supervision of implementation at national and local levels
160	National	ASDS II	Allocate adequate resources to training of researchers and provide incentives to retain trained personnel
161	National	ASDS II	Increased rates of technology adoption
162	National	ASDS II	% of national food requirements supplied by domestic production
163	National	ASDS II	Number of rural households with calorie availability < xxx/person/day
164	National	ASDS II	% of low birth weights and stunted children under five years
165	National	ASDS II	% of households eating < 2 meals/day
166	National	ASDS II	% of population with anemia, vitamin A and iodine deficiency
167	National	ASDS II	% of pregnant women and children under 5 with specific nutrient/micronutrient deficiencies
168	National	ASDS II	% of districts reporting food shortages
169	National	ASDS II	% of land used for crops of high nutritional value
170	National	ASDS II	Number of households potentially requiring emergency assistance
171	National	ASDS II	% of affected households receiving assistance
172	National	ASDS II	Results-based performance, participation and accountability by key actors
173	National	ASDS II	% DADP that meet revised assessment criteria
174	National	ASDS II	LGAs submitting quarterly ASDP reports
175	National	ASDS II	LGAs with clean financial audit reports for agriculture expenditure
176	National	Agriculture Routine Data System (ARDS), VAEO/WAEO format	Number of household members, disaggregated by gender
177	National	ARDS–VAEO/WAEO	Number of household members engaged in crop, livestock and fishery production
178	National	ARDS–VAEO/WAEO	Potential area of improved irrigation (ha)
179	National	ARDS–VAEO/WAEO	Area under improved irrigation
180	National	ARDS–VAEO/WAEO	Season irrigated with improved irrigation and with traditional schemes (separate)
181	National	ARDS–VAEO/WAEO	Status of the irrigation scheme

182	National	ARDS–VAEO/WAEO	Number of members in irrigation organisations (IO)
183	National	ARDS–VAEO/WAEO	Number of farmers using irrigation infrastructures (both members and nonmembers of IO)
184	National	ARDS–VAEO/WAEO	Number and type of agricultural, livestock and fishery machines (individually and group owned)
185	National	ARDS–VAEO/WAEO	Number and type of agricultural implements (individually and group owned)
186	National	ARDS–VAEO/WAEO	Number and type of hand-operated agricultural implements (individually and group owned)
187	National	ARDS–VAEO/WAEO	Number of agro-processing machines (individually and group owned)
188	National	ARDS–VAEO/WAEO	Number of field schools
189	National	ARDS–VAEO/WAEO	Number and type of farmers who started the field school (disaggregated by gender)
190	National	ARDS–VAEO/WAEO	Number and type of farmers who finished the field school (disaggregated by gender)
191	National	ARDS–VAEO/WAEO	Number of villages covered
192	National	ARDS–VAEO/WAEO	Number of farmers who applied the techniques learned
193	National	ARDS–VAEO/WAEO	Annual requirement and type of inorganic fertilizer
194	National	ARDS–VAEO/WAEO	Amount and type of inorganic fertilizer used per year
195	National	ARDS–VAEO/WAEO	Annual requirement and type of agrochemicals
196	National	ARDS–VAEO/WAEO	Amount and type of agrochemicals used per year
197	National	ARDS–VAEO/WAEO	Annual requirement and type of improved seed
198	National	ARDS–VAEO/WAEO	Amount and type of improved seed used per year
199	National	ARDS–VAEO/WAEO	Type and number of improved varieties and breeds on the farm (crops, livestock)
200	National	ARDS–VAEO/WAEO	Type, number and state of livestock infrastructure
201	National	ARDS–VAEO/WAEO	Total grazing land in the village
202	National	ARDS–VAEO/WAEO	Utilized land
203	National	ARDS–VAEO/WAEO	Total Demarcated Area (ha) (v)
204	National	ARDS–VAEO/WAEO	Total Area Leased (ha) (vi)
205	National	ARDS–VAEO/WAEO	Number of farms / plots under improved pastures
206	National	ARDS–VAEO/WAEO	Area under improved pastures (ha)
207	National	ARDS–VAEO/WAEO	Seed Production under improved pastures (kg)
208	National	ARDS–VAEO/WAEO	Amount of hay bales/bundles produced (hay) under improved pastures
209	National	ARDS–VAEO/WAEO	Amount of crop residue hay bales/bundles produced (hay*)
210	National	ARDS–VAEO/WAEO	Area of crop residue farms/ plots grazed in situ (ha)
211	National	ARDS–VAEO/WAEO	Name of TV station available and number of villages covered
212	National	ARDS–VAEO/WAEO	Name of radio station available and number of villages covered
213	National	ARDS–VAEO/WAEO	Name of telecommunication company available and number of villages covered
214	National	ARDS–VAEO/WAEO	Name of local radio or TV program in agriculture/livestock and frequency (per week)
215	National	ARDS–VAEO/WAEO	Village food situation (good/average/bad)
216	National	ARDS–VAEO/WAEO	Number of household with no food
217	National	ARDS–VAEO/WAEO	Number of household with insufficient food

218	National	ARDS–VAEO/WAEO	Number of household with enough food
219	National	ARDS–VAEO/WAEO	Number of household with excess food
220	National	ARDS–VAEO/WAEO	Number of Savings and Credit Cooperative Societies (SACCOs)
221	National	ARDS–VAEO/WAEO	Individual members in each SACCO (disaggregated by gender)
222	National	ARDS–VAEO/WAEO	Number and type of associations/groups for each value chain stage (production, processing, marketing)
223	National	ARDS–VAEO/WAEO	Number of individual members (gender disaggregated) for each type of each value chain association/group (production, processing, marketing)
224	National	ARDS–VAEO/WAEO	Number of individual members under each type of each value chain association/group (production, processing, marketing) that own a bank account
225	National	ARDS–VAEO/WAEO	Number of farmers trained (gender disaggregated) through methods other than FFS, training topic, method and provider
226	National	ARDS–VAEO/WAEO	Type of biological control measure for each crop type
227	National	ARDS–VAEO/WAEO	Area under biological control for each control measure
228	National	ARDS–VAEO/WAEO	Types of crops harvested under irrigation
229	National	ARDS–VAEO/WAEO	Planted area (rainy season and dry season)
230	National	ARDS–VAEO/WAEO	Yields (rainy season and dry season)
231	National	ARDS–VAEO/WAEO	Production (rainy season and dry season)
232	National	ARDS–VAEO/WAEO	Type of erosion, area destroyed
233	National	ARDS–VAEO/WAEO	Type of control measure for each soil erosion type
234	National	ARDS–VAEO/WAEO	Area under soil control measure for each soil erosion type
235	National	ARDS–VAEO/WAEO	Area cultivated under short rains, by different means of cultivation (by tractors, by draught animals, by hand hoes, no tillage)
236	National	ARDS–VAEO/WAEO	Area cultivated under rainy season, by different means of cultivation (by tractors, by draught animals, by hand hoes, no tillage)
237	National	ARDS–VAEO/WAEO	Area planted under short rains and rainy season, by different means of cultivation (by tractors, by draught animals, by hand hoes, no tillage)
238	National	ARDS–VAEO/WAEO	Area planted under rainy season, by different means of cultivation (by tractors, by draught animals, by hand hoes, no tillage)
239	National	ARDS–VAEO/WAEO	Area weeded under short rains, by different means of cultivation (by tractors, by draught animals, by hand hoes, no tillage)
240	National	ARDS–VAEO/WAEO	Area weeded under rainy season, by different means of cultivation (by tractors, by draught animals, by hand hoes, no tillage)
241	National	ARDS–VAEO/WAEO	Area harvested under short rains, by different means of cultivation (by tractors, by draught animals, by hand hoes, no tillage)
242	National	ARDS–VAEO/WAEO	Area harvested under rainy season, by different means of cultivation (by tractors, by draught animals, by hand hoes, no tillage)
243	National	ARDS–VAEO/WAEO	Amount of rain (mm) and number of days
244	National	ARDS–VAEO/WAEO	Type of disaster (drought, flood, hunger, plant/livestock diseases, etc.) occurred that month
245	National	ARDS–VAEO/WAEO	Output of main extension activities (and comments in agricultural sector in the assessed month)
246	National	ARDS–VAEO/WAEO	Implementation of seasonal crops (planted area, productivity, market price), for each crop type assessed
247	National	ARDS–VAEO/WAEO	Plant health and chemical control (type of pest/disease, type of crop affected, severity, affected area, control measure, type and amount of pesticide used, area rescued)
248	National	ARDS–VAEO/WAEO	Livestock slaughtered (number and average retail price per kg)
249	National	ARDS–VAEO/WAEO	Name of place for slaughter/ inspection, type of animal and type of animal affected



250	National	ARDS–VAEO/WAEO	Type and amount of livestock products available during the assessed month
251	National	ARDS–VAEO/WAEO	Type of livestock, type of disease, number affected, number treated, number recovered, number died, treatment applied
252	National	ARDS–VAEO/WAEO	Type of livestock, number dipped, number sprayed, number vaccinated and medicine applied for each
253	National	ARDS–VAEO/WAEO	Type of livestock service for each livestock type (cutting hoof, castration, etc.)
254	National	CSA Guideline	Systems for promotion as well as coordination of CSA packages in agricultural plans and policies at district level agreed and in place
255	National	CSA Guideline	% of district resources allocated to promote CSA adoption by local farmers
256	National	CSA Guideline	% of all district in Tanzania promote implementation of CSA packages to their local farmers
257	National	CSA Guideline	% of farmers in district practicing CSA packages to increase land and water productivity under current climate variability
258	National	CSA Guideline	Farmers in six pilot communities and others reporting having improved access to services they need
259	National	CSA Guideline	Number of service providers reporting use of new skills and knowledge, based on community needs
260	Regional	Comprehensive Africa Agriculture Development Programme Results Framework (CAADP RF)	1.1.1 GDP per capita
261	Regional	CAADP RF	1.1.2 Household final consumption expenditure
262	Regional	CAADP RF	1.2.1 Prevalence of undernourishment
263	Regional	CAADP RF	1.2.2i Prevalence of underweight
264	Regional	CAADP RF	1.2.2ii Prevalence of stunting
265	Regional	CAADP RF	1.2.2iii Prevalence of wasting
266	Regional	CAADP RF	1.2.2iv Minimum dietary diversity–women
267	Regional	CAADP RF	1.2.2v Minimum acceptable diet for 6-23 months old infants
268	Regional	CAADP RF	1.2.3 Cereal import dependency ratio
269	Regional	CAADP RF	1.3.1 Employment rate (% of population)
270	Regional	CAADP RF	1.3.2 Number of jobs created per annum by age category and sex
271	Regional	CAADP RF	1.3.3 Poverty gap at national line
272	Regional	CAADP RF	1.3.4 Extreme Poverty headcount ratio at \$1.25/day
273	Regional	CAADP RF	1.4.1 Percent of households that are resilient to climate and weather-related shocks
274	Regional	CAADP RF	1.4.2 Human sustainable development index
275	Regional	CAADP RF	2.1.1 Agriculture value added (absolute values)
276	Regional	CAADP RF	2.1.2 Agriculture production index (2004–2006=100)
277	Regional	CAADP RF	2.1.3 Agriculture value added per agricultural worker
278	Regional	CAADP RF	2.1.4 Agriculture value added per hectare of arable land
279	Regional	CAADP RF	2.1.5 Yields for the five AU priority commodities
280	Regional	CAADP RF	2.2.1. Value of intra-African trade
281	Regional	CAADP RF	2.2.2 Domestic food price index volatility
282	Regional	CAADP RF	2.3.1 Percent of agricultural five priority products that is lost post-harvest

283	Regional	CAADP RF	2.3.2 Activity and inclusive employment in industries related to agriculture value chains
284	Regional	CAADP RF	2.4.1. Coverage of social assistance, social protection, social insurance and labour programmes
285	Regional	CAADP RF	2.4.2 Existence of food reserves, local purchases for relief programmes, early-warning systems and food-feeding programmes
286	Regional	CAADP RF	2.5.1. Share of agriculture under sustainable land management practices
287	Regional	CAADP RF	3.1.1 Existence of a new National Agricultural Investment Plan/National Agriculture and Food Security Investment Plan developed through an inclusive and participatory process
288	Regional	CAADP RF	3.2.1 Existence of inclusive institutionalized mechanisms for mutual accountability and peer review
289	Regional	CAADP RF	3.3.1 Existence of and quality in the implementation of evidence-informed policies and corresponding human resources
290	Regional	CAADP RF	3.4.1 Existence of a functional multi-sectorial and multi-stakeholder coordination body
291	Regional	CAADP RF	3.4.2. Cumulative number of agriculture-related Public Private Partnerships (PPPs) that are successfully undertaken
292	Regional	CAADP RF	3.4.3 Cumulative value of investments in the PPPs
293	Regional	CAADP RF	3.5.1 Government agriculture expenditure growth rate
294	Regional	CAADP RF	3.5.2 Share government agriculture expenditure (% of total government expenditure)
295	Regional	CAADP RF	3.5.3 Government agriculture expenditure as % of agriculture value added
296	Regional	CAADP RF	3.5.4 Growth in private-sector investment in agriculture and agribusiness
297	Regional	CAADP RF	3.6.1 Index of capacity to generate and use statistical data and information (African Statistical Development Index)
298	Regional	CAADP RF	3.6.2 Existence of an operational country Strategic Analysis and Knowledge Support System
299	Regional	African Union (AU) Scorecard	PC 1.1 CAADP Process Completion Index
300	Regional	AU Scorecard	PC 1.2 Existence of and quality of multi-sectorial and multi-stakeholder coordination body
301	Regional	AU Scorecard	PC 1.3 Evidence-based policies, supportive institutions, and corresponding human resources (EIP)
302	Regional	AU Scorecard	PC 2.1i Public agriculture expenditure as share of total public expenditure (PAE)
303	Regional	AU Scorecard	PC 2.1ii Public agriculture expenditure as % of agriculture value added
304	Regional	AU Scorecard	PC 2.1iii Official Development Assistance (ODA) disbursed to agriculture as % of commitment
305	Regional	AU Scorecard	PC 2.2 Ratio of domestic private sector investment to public investment in agriculture
306	Regional	AU Scorecard	PC 2.3 Ratio of foreign private direct investment to public investment in agriculture
307	Regional	AU Scorecard	PC 2.4 Proportion of men and women engaged in agriculture with access to financial services
308	Regional	AU Scorecard	PC 3.1i Fertilizer consumption
309	Regional	AU Scorecard	PC 3.1ii Growth rate of the size of irrigated areas from its value of the year 2000
310	Regional	AU Scorecard	PC 3.1iii Growth rate of the ratio of supplied quality agriculture inputs (seed, breed, fingerlings) to the total national inputs requirements for the commodity
311	Regional	AU Scorecard	PC 3.1iv Proportion of farmers having access to Agricultural Advisory Services

312	Regional	AU Scorecard	PC 3.1v Total agricultural research spending as a share of agricultural GDP
313	Regional	AU Scorecard	PC 3.1vi Proportion of farm households with ownership or secure land rights
314	Regional	AU Scorecard	PC 3.2i Growth rate of agricultural value added, per agricultural worker
315	Regional	AU Scorecard	PC 3.2ii Growth rate of agricultural value added, per hectare of agricultural arable land
316	Regional	AU Scorecard	PC 3.2iii Growth rate of yields for the 5 national priority commodities and possibly for the 11 AU priority agricultural commodities
317	Regional	AU Scorecard	PC 3.3 Reduction rate of post-harvest losses for (at least) the 5 national priority commodities and possibly for the 11 AU priority agricultural commodities
318	Regional	AU Scorecard	PC 3.4 Budget lines (%) on social protection as percentage of the total resource requirements for coverage of the vulnerable social groups
319	Regional	AU Scorecard	PC 3.5i Prevalence of stunting
320	Regional	AU Scorecard	PC 3.5ii Prevalence of underweight
321	Regional	AU Scorecard	PC 3.5iii Prevalence of wasting
322	Regional	AU Scorecard	PC 3.5iv Proportion of the population that is undernourished
323	Regional	AU Scorecard	PC 3.5v Growth rate of the proportion of Minimum Dietary Diversity–Women
324	Regional	AU Scorecard	PC 3.5vi Proportion of 6-23 months old children who met the Minimum Acceptable Diet
325	Regional	AU Scorecard	PC 4.1i Growth rate of the Agriculture Value Added
326	Regional	AU Scorecard	PC 4.1ii Agriculture contribution to the overall poverty reduction target
327	Regional	AU Scorecard	PC 4.1iii Reduction rate of poverty headcount ratio, at national poverty line
328	Regional	AU Scorecard	PC 4.1iv Reduction rate of poverty headcount ratio, at international poverty line
329	Regional	AU Scorecard	PC 4.1v Reduction rate of the gap between the wholesale price and farm gate price
330	Regional	AU Scorecard	PC 4.2 Number of priority agricultural commodity value chains for which PPP is established with strong linkage to smallholder agriculture
331	Regional	AU Scorecard	PC 4.3 Percentage of youth that is engaged in new job opportunities in agriculture value chains
332	Regional	AU Scorecard	PC 3.4 Proportion of rural women that are empowered in agriculture
333	Regional	AU Scorecard	PC 5.1 Growth rate of the value of trade of agricultural commodities and services within Africa
334	Regional	AU Scorecard	PC 5.2i Trade Facilitation Index
335	Regional	AU Scorecard	PC 5.2ii Domestic Food Price Volatility Index
336	Regional	AU Scorecard	PC 6.1i Percentage of farm, pastoral, and fisher households that are resilient to climate and weather-related shocks
337	Regional	AU Scorecard	PC 6.1ii Share of agriculture land under sustainable land management practices
338	Regional	AU Scorecard	PC 6.2 Existence of government budget lines to respond to spending needs on resilience building initiatives
339	Regional	AU Scorecard	PC 7.1 Index of capacity to generate and use agriculture statistical data and information (ASCI)
340	Regional	AU Scorecard	PC 7.2 Existence of inclusive institutionalized mechanisms and platforms for mutual accountability and peer review
341	Regional	AU Scorecard	PC 7.3 Country Biennial Report (BR) submission
342	International	United Nations Framework Convention	Total GHG emissions excluding land use, land-use change and forestry/land-use change and forestry (LULUCF/LUCF)

		on Climate Change (UNFCCC)	
343	International	UNFCCC	Total GHG emissions including LULUCF/LUCF
344	International	UN Sustainable Development Goals (SDGs)	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
345	International	UN SDGs	1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and vulnerable
346	International	UN SDGs	1.4.1 Proportion of population living in households with access to basic services
347	International	UN SDGs	1.4.2 Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure
348	International	UN SDGs	1.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people <sup>a</sup>
349	International	UN SDGs	1.5.2 Direct disaster economic loss in relation to global gross domestic product (GDP) <sup>a</sup>
350	International	UN SDGs	1.5.3 Number of countries with national and local disaster risk reduction strategies <sup>a</sup>
351	International	UN SDGs	1.a.1 Proportion of resources allocated by the government directly to poverty reduction programmes
352	International	UN SDGs	1.a.2 Proportion of total government spending on essential services (education, health and social protection)
353	International	UN SDGs	1.b.1 Proportion of government recurrent and capital spending to sectors that disproportionately benefit women, the poor and vulnerable groups
354	International	UN SDGs	2.1.1 Prevalence of undernourishment
355	International	UN SDGs	2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
356	International	UN SDGs	2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age
357	International	UN SDGs	2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)
358	International	UN SDGs	2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size
359	International	UN SDGs	2.3.2 Average income of small-scale food producers, by sex and indigenous status
360	International	UN SDGs	2.4.1 Proportion of agricultural area under productive and sustainable agriculture
361	International	UN SDGs	2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities
362	International	UN SDGs	2.5.2 Proportion of local breeds classified as being at-risk, not-at-risk or at unknown level of risk of extinction
363	International	UN SDGs	2.a.1 The agriculture orientation index for government expenditures
364	International	UN SDGs	2.a.2 Total official flows (official development assistance plus other official flows) to the agriculture sector
365	International	UN SDGs	2.b.1 Producer Support Estimate
366	International	UN SDGs	2.b.2 Agricultural export subsidies
367	International	UN SDGs	2.c.1 Indicator of food price anomalies

368	International	UN SDGs	5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure
369	International	UN SDGs	6.4.1 Change in water-use efficiency over time
370	International	UN SDGs	8.1.1 Annual growth rate of real GDP per capita
371	International	UN SDGs	8.2.1 Annual growth rate of real GDP per employed person
372	International	UN SDGs	9.1.1 Proportion of the rural population who live within 2 km of an all-season road
373	International	UN SDGs	9.4.1 CO <sub>2</sub> emission per unit of value added
374	International	UN SDGs	9.5.1 Research and development expenditure as a proportion of GDP
375	International	UN SDGs	9.5.2 Researchers (in full-time equivalent) per million inhabitants
376	International	UN SDGs	9.c.1 Proportion of population covered by a mobile network, by technology
377	International	UN SDGs	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population
378	International	UN SDGs	10.2.1 Proportion of people living below 50 per cent of median income, by age, sex and persons with disabilities
379	International	UN SDGs	10.3.1 Proportion of the population reporting having personally felt discriminated against or harassed within the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law
380	International	UN SDGs	11.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people <sup>a</sup>
381	International	UN SDGs	11.5.2 Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services <sup>a</sup>
382	International	UN SDGs	12.3.1 Global food loss index
383	International	UN SDGs	13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low GHG emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)
384	International	UN SDGs	13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula
385	International	UN SDGs	13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions
386	International	UN SDGs	15.2.1 Progress towards sustainable forest management
387	International	UN SDGs	15.3.1 Proportion of land that is degraded over total land area
388	International	UN SDGs	15.6.1 Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits
389	International	UN SDGs	15.9.1 Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020
390	International	UN SDGs	16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)
391	International	UN SDGs	17.8.1 Proportion of individuals using the Internet

392	International	UN SDGs	17.18.3 Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding
393	Project	USAID Feed the Future (FtF)	Prevalence of underweight children under five years of age
394	Project	USAID FtF	Prevalence of Poverty: Percent of people living on less than \$1.25/day
395	Project	USAID FtF	Percent change in agricultural GDP
396	Project	USAID FtF	Daily per capita expenditures (as a proxy for income) of U.S. government (USG) assisted areas
397	Project	USAID FtF	Women's Empowerment in Agriculture Index
398	Project	USAID FtF	Prevalence of stunted children under five years of age
399	Project	USAID FtF	Prevalence of wasted children under five years of age
400	Project	USAID FtF	Prevalence of underweight women
401	Project	USAID FtF	Gross margin per hectare, animal or cage of selected product (crops/animals selected varies by country)
402	Project	USAID FtF	Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance
403	Project	USAID FtF	Number of individuals who have received USG-supported long-term agricultural sector productivity or productivity training
404	Project	USAID FtF	Number of individuals who have received USG supported short-term agricultural sector productivity or productivity training
405	Project	USAID FtF	Number of productivity private enterprises (for profit), producers' organizations, water users' associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG assistance
406	Project	USAID FtF	Number of members of producer organizations and community based organizations receiving USG assistance
407	Project	USAID FtF	Number of people implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance
408	Project	USAID FtF	Number of private enterprises (for profit), producers' organizations, water users' associations, women's groups, trade and business associations, and CBOs that applied new technologies or management practices as a result of USG assistance
409	Project	USAID FtF	Hectares under new or improved/rehabilitated irrigation or drainage services as a result of USG assistance
410	Project	USAID FtF	Number of hectares under improved technologies or management practices as a result of USG assistance
411	Project	USAID FtF	Number of rural households benefiting directly from USG interventions
412	Project	USAID FtF	Number of technologies or management practices in one of the following phases of development: ...in Phase I: under research as a result of USG; ...in Phase II: under field testing as a result of USG assistance; in Phase III: made available for transfer as a result of USG assistance
413	Project	USAID FtF	Number of agricultural and nutritional enabling environment policies completing the following processes/steps of development as a result of USG assistance in each case: Stage 1: Analysis; Stage 2: Stakeholder consultation/public debate; Stage 3: Drafting or revision; Stage 4: Approval (legislative or regulatory); Stage 5: Full and effective implementation
414	Project	USAID FtF	Number of national policies supporting regionally agreed-upon policies for which a national-level implementation action has been taken as a result of USG assistance (regional missions only)
415	Project	USAID FtF	Value of incremental sales (collected at farm-level) attributed to FTF implementation
416	Project	USAID FtF	Percent change in value of intra-regional trade in targeted agricultural commodities (for regional missions)

417	Project	USAID FtF	Value of exports of targeted agricultural commodities as a result of USG assistance (for bilateral missions)
418	Project	USAID FtF	Number of households with formalized land
419	Project	USAID FtF	Total increase in installed storage capacity (m3)
420	Project	USAID FtF	Kilometers of roads improved or constructed
421	Project	USAID FtF	Value of agricultural and rural loans
422	Project	USAID FtF	Number of micro, small and medium enterprises (MSMEs), including farmers, receiving USG assistance to access loans
423	Project	USAID FtF	Number of MSMEs, including farmers, receiving business development services from USG assisted sources
424	Project	USAID FtF	Number of public-private partnerships formed as a result of FtF assistance
425	Project	USAID FtF	Value of new private sector investment in the agriculture sector or food chain leveraged by FtF implementation
426	Project	USAID FtF	Number of firms (excluding farms) or CSOs engaged in agricultural and Productivity-related manufacturing and services now operating more profitably (at or above cost) because of USG assistance
427	Project	USAID FtF	Percentage of national budget allocated to nutrition
428	Project	USAID FtF	Percentage of national budget allocated to agriculture
429	Project	USAID FtF	Number of jobs attributed to FtF implementation
430	Project	USAID FtF	Prevalence of households with moderate or severe hunger
431	Project	USAID FtF	Number of USG social assistance beneficiaries participating in productive safety nets
432	Project	USAID FtF	Depth of Poverty: Mean percent shortfall relative to the \$1.25 poverty line
433	Project	USAID FtF	Number of vulnerable households benefiting directly from USG interventions
434	Project	USAID FtF	Prevalence of children 6-23 months receiving a minimum acceptable diet
435	Project	USAID FtF	Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age
436	Project	USAID FtF	Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodities
437	Project	USAID FtF	Prevalence of children 6-23 months who consume targeted nutrient-rich value chain commodities
438	Project	USAID FtF	Total quantity of targeted nutrient-rich value chain commodities produced by direct beneficiaries that is set aside for home consumption
439	Project	USAID FtF	Prevalence of exclusive breastfeeding of children under six months of age
440	Project	USAID FtF	Number of people trained in child health and nutrition through USG-supported programmes
441	Project	USAID FtF	Prevalence of anemia among women of reproductive age
442	Project	USAID FtF	Prevalence of anemia among children 6–59 months
443	Project	USAID FtF	Number of children under five reached by USG-supported nutrition programmes
444	Project	USAID FtF	Number of health facilities with established capacity to manage acute undernutrition
445	Project	USAID FtF	Number of children under five years of age who received vitamin A from USG-supported programmes
446	Project	DFID Climate Investment Fund	Degree of integration of climate change into national planning

447	Project	DFID Climate Investment Fund	Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience
448	Project	DFID Climate Investment Fund	Quality of & extent to which climate responsive instruments/investment models are developed and tested
449	Project	DFID Climate Investment Fund	Extent to which vulnerable households, communities, businesses and public sector use improved Pilot Programme for Climate Resilience (PPCR) supported tools
450	Project	DFID Climate Investment Fund	Number of people supported by PPCR to cope with climate change
451	Project	DFID Adaptation Fund	Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis
452	Project	DFID Adaptation Fund	Number and type of projects that conduct and update risk and vulnerability assessments
453	Project	DFID Adaptation Fund	Development of early warning systems
454	Project	DFID Adaptation Fund	Number and type of targeted institutions with increased capacity to minimize exposure to climate variability risks
455	Project	DFID Adaptation Fund	Number of staff trained to respond to, and mitigate impacts of, climate-related events
456	Project	DFID Adaptation Fund	Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased
457	Project	DFID Adaptation Fund	Number of people with reduced risk to extreme weather events
458	Project	DFID Adaptation Fund	Percentage of population covered by adequate risk reduction systems
459	Project	DFID Adaptation Fund	Number of people affected by climate variability
460	Project	DFID Adaptation Fund	Number and type of risk reduction actions or strategies introduced at local level
461	Project	DFID Adaptation Fund	Number of news outlets in the local press and media that have covered the topic
462	Project	DFID Adaptation Fund	Modification of behaviour in targeted population
463	Project	DFID Adaptation Fund	Development sectors' services responsive to evolving needs from changing and variable climate
464	Project	DFID Adaptation Fund	Number and type of health or social infrastructure developed or modified to respond to new conditions resulting from climate variability and change (by type)
465	Project	DFID Adaptation Fund	Number of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)
466	Project	DFID Adaptation Fund	Physical infrastructure improved to withstand climate change and variability-induced stress
467	Project	DFID Adaptation Fund	Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress
468	Project	DFID Adaptation Fund	Number and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)
469	Project	DFID Adaptation Fund	Assets
470	Project	DFID Adaptation Fund	Number and type of adaptation assets (physical as well as knowledge) created in support of individual or community livelihood strategies
471	Project	DFID Adaptation Fund	Type of income sources for households generated under climate change scenario
472	Project	DFID Adaptation Fund	Percentage of targeted population with sustained climate-resilient livelihoods
473	Project	DFID Adaptation Fund	Climate change priorities are integrated into national development strategy
474	Project	DFID Adaptation Fund	Number, type and sector of policies introduced or adjusted to address climate change risks



475	Project	DFID Adaptation Fund	Number of targeted development strategies with incorporated climate change priorities enforced
476	Project	DFID Adaptation Fund	Number of beneficiaries
477	Project	DFID Adaptation Fund	Early warning systems
478	Project	DFID Adaptation Fund	Assets produced, developed, improved or strengthened
479	Project	DFID Adaptation Fund	Increased income or avoided decrease in income
480	Project	DFID Adaptation Fund	Natural assets protected or rehabilitated
481	Project	DFID International Climate Fund	Numbers of people, including women and girls, less vulnerable to the effects of climate change
482	Project	DFID International Climate Fund	Value of assets protected/losses avoided
483	Project	DFID International Climate Fund	Number of people receiving support through a mechanism with a private-sector delivery partner
484	Project	DFID International Climate Fund	Number of sector and national plans under implementation that mitigate risks and ensure adaptation to climate change by poor people
485	Project	IFAD Adaptation for Smallholder Agriculture Programme (ASAP)	Number of poor smallholder household members whose climate resilience has been increased because of ASAP, disaggregated by sex
486	Project	IFAD ASAP	Percentage increase in number of non-invasive on-farm plant species on smallholder farms
487	Project	IFAD ASAP	Percentage tonnes of GHG emissions (CO <sub>2</sub> e) avoided and/or sequestered
488	Project	IFAD ASAP	Number increase in hectares of land managed under climate resilient practices
489	Project	IFAD ASAP	Percentage change in water-use efficiency by men and women
490	Project	IFAD ASAP	Percentage of community groups, including women's groups, involved in environmental and natural resource management (ENRM) and/or disaster risk reduction (DRR) formed or strengthened
491	Project	IFAD ASAP	\$ value of new or existing rural infrastructure made climate-resilient
492	Project	IFAD ASAP	Number of international and country dialogues where IFAD or IFAD-supported partners make an active contribution
493	Project	IFAD Results and Impact Management System (RIMS)	Number of persons receiving services promoted or supported by the project
494	Project	IFAD RIMS	Corresponding number of households reached
495	Project	IFAD RIMS	Estimated corresponding total number of household members
496	Project	IFAD RIMS	Number of persons whose ownership or user rights over natural resources have been registered in national cadasters and/or geographic information management systems
497	Project	IFAD RIMS	Number of hectares of farmland under water-related infrastructure constructed/rehabilitated ( <i>current RIMS 1.1.5</i> )
498	Project	IFAD RIMS	Number of rural producers accessing production inputs and/or technological packages ( <i>modified current RIMS indicators 1.2.6/1.2.7</i> )
499	Project	IFAD RIMS	Number of persons trained in production practices and/or technologies ( <i>modified current RIMS 1.2.2/1.2.3/1.2.4</i> )
500	Project	IFAD RIMS	Number of persons in rural areas accessing financial services (savings, credit, insurance, remittances, etc.) ( <i>modified current RIMS indicator 2.3.2</i> )
501	Project	IFAD RIMS	Number of financial service providers supported in delivering outreach strategies, financial products and services to rural areas
502	Project	IFAD RIMS	Number of persons in rural areas trained in financial literacy and/or use of financial products and services ( <i>modified current RIMS indicators 1.3.12</i> )

503	Project	IFAD RIMS	Number of rural enterprises accessing business development services ( <i>modified current RIMS 1.5.4</i> )
504	Project	IFAD RIMS	Number of persons trained in income-generating activities or business management ( <i>merged current RIMS 1.5.1 1.5.3 and 1.4.1</i> )
505	Project	IFAD RIMS	Number of rural producers' organizations supported ( <i>modified current RIMS 1.4.4 and 1.4.6</i> )
506	Project	IFAD RIMS	Number of supported rural producers that are members of a rural producers' organization ( <i>modified current RIMS 1.4.5</i> )
507	Project	IFAD RIMS	Number of kilometres of roads constructed, rehabilitated or upgraded ( <i>current RIMS 1.4.2</i> )
508	Project	IFAD RIMS	Number of market, processing or storage facilities constructed
509	Project	IFAD RIMS	Number of groups supported to sustainably manage natural resources and climate-related risks ( <i>modified current RIMS 1.6.11</i> )
510	Project	IFAD RIMS	Number of persons provided with climate information services ( <i>modified current RIMS 1.1.15</i> )
511	Project	IFAD RIMS	Number of persons accessing technologies that sequester carbon or reduce greenhouse gas emissions ( <i>modified current RIMS 1.1.18</i> )
512	Project	IFAD RIMS	(Number) Percentage of persons/households reporting a significant reduction in the time spent for collecting water or fuel
513	Project	IFAD RIMS	Number of hectares of land brought under climate-resilient management ( <i>modified current RIMS 1.1.17</i> )
514	Project	IFAD RIMS	Number of policy-relevant knowledge products completed
515	Project	IFAD RIMS	Number of existing/new laws, regulations, policies or strategies proposed to policymakers for approval, ratification or amendment
516	Project	IFAD RIMS	Number of functioning multi-stakeholder platforms supported
517	Project	FAO Resilience Index Measurement and Analysis (RIMA)	Access to basic services–Energy
518	Project	FAO Resilience Index Measurement and Analysis (RIMA II)	Access to basic services–Sanitation
519	Project	FAO RIMA II	Access to basic services–Distance to water source
520	Project	FAO RIMA II	Access to basic services–Distance to school
521	Project	FAO RIMA II	Access to basic services–Distance to hospital
522	Project	FAO RIMA II	Access to basic services–Distance to market
523	Project	FAO RIMA II	Access to basic services–Distance to credit services
524	Project	FAO RIMA II	Assets–Household asset index
525	Project	FAO RIMA II	Assets–Cultivated land value per capita
526	Project	FAO RIMA II	Assets–Tropical Livestock Units (TLU) per capita
527	Project	FAO RIMA II	Assets–Agricultural inputs
528	Project	FAO RIMA II	Social Safety Nets–Access to credit
529	Project	FAO RIMA II	Social Safety Nets–In-kind transfers per capita
530	Project	FAO RIMA II	Social Safety Nets–Participation in associations
531	Project	FAO RIMA II	Adaptive capacity–Average education
532	Project	FAO RIMA II	Adaptive capacity–Income diversification index
533	Project	FAO RIMA II	Adaptive capacity–Independency ratio (active/nonactive members)
534	Project	FAO RIMA II	Adaptive capacity–Coping Strategy Index
535	Project	FAO RIMA II	Per capita food consumption–Monetary value, expressed in US dollars, of per capita food consumption, including bought, auto-produced, received for free (e.g., as gifts) and stored food

536	Project	FAO RIMA II	Household Dietary Diversity Score—Number of unique foods (or food groups) consumed by household members based on the past seven days recall
537	National	World Bank (WB)—CSA Index	Agricultural adaptation policy (how a country's intent to support CSA is integrated at the national level across agricultural policies, country development strategies, and other national climate change policies)
538	National	WB—CSA Index	Agricultural mitigation policy (how a country's intent to support CSA is integrated at the national level across agricultural policies, country development strategies, and other national climate change policies)
539	National	WB—CSA Index	Economic readiness (whether the enabling environment is conducive to agriculture-led growth, agribusiness investment and competitiveness)
540	National	WB—CSA Index	Governance readiness (political stability, control of corruption, regulatory quality, rule of law)
541	National	WB—CSA Index	Social readiness (social inequality, information and communication technology (ICT) infrastructure, education, innovation)
542	National	WB—CSA Index	Extension services (capacity of national extension services to provide relevant information and advice to farmers)
543	National	WB—CSA Index	Agriculture R&D
544	National	WB—CSA Index	Rural Access Index (RAI) (the proportion of the rural population with adequate access to the transport system)
545	National	WB—CSA Index	Social safety nets (conditional cash transfers, unconditional cash transfers, conditional in-kind transfers, unconditional in-kind transfers and public works expenditure)
546	National	WB—CSA Index	National GHG inventory system
547	National	WB—CSA Index	National agricultural risk management systems (buffer stock, emergency grain reserves, warehouse receipt systems, tariffs and quotas, market information systems, weather forecasts, early warning systems and index-based insurance)
548	National	WB—CSA Index	Adaptive capacity (availability of social resources to reduce exposure and sensitivity)
549	National	WB—CSA Index	Disaster risk management coordination (whether a country integrates the agricultural sector into disaster risk reduction (DRR) planning, or, conversely, how DRR is integrated into the agricultural sector)
550	National	WB—CSA Index	Coordination mechanism (across sectors and types of stakeholders)
551	Project	WB—CSA Index	The technology leads to an increase in yields of the producers (%)
552	Project	WB—CSA Index	The technology reduces the share of agricultural land classified as having moderate to severe water erosion/wind risk (%)
553	Project	WB—CSA Index	The technology enhances soil fertility (%)
554	Project	WB—CSA Index	The technology enhances biodiversity of the farming landscape in comparison with current interventions in similar farming systems.
555	Project	WB—CSA Index	The technology increases the share of irrigated agricultural land as a result of the technology (%)
556	Project	WB—CSA Index	The technology reduces water withdrawal for agriculture use as a share of total water withdrawal (%)
557	Project	WB—CSA Index	The technology reduces the agriculture energy use as a share of total household energy use (%)
558	Project	WB—CSA Index	The technology increases the share of agricultural land on which integrated pest management practices are adopted (%)
559	Project	WB—CSA Index	The technology improves livestock diversification in comparison with current interventions in similar farming systems
560	Project	WB—CSA Index	The technology improves livestock resource management in comparison with current interventions in similar farming systems
561	Project	WB—CSA Index	The technology improves feed production in comparison with current interventions in similar farming systems

562	Project	WB-CSA Index	The technology leads to the diversification of livelihood activities in comparison with current interventions in similar farming systems
563	Project	WB-CSA Index	The technology will improve the human capital (technical skill levels) of producers in the target area
564	Project	WB-CSA Index	The technology will increase the stability of agricultural production needed to help producers meet their own basic food security and income needs
565	Project	WB-CSA Index	The technology will promote the diversification of the income and asset bases of producers
566	Project	WB-CSA Index	The technology will promote crop diversification in the target area
567	Project	WB-CSA Index	The technology will involve the incorporation of site-specific knowledge in its application
568	Project	WB-CSA Index	The producers in the target area will have appropriate access to IPRs needed for the deployment of the CSA technology
569	Project	WB-CSA Index	The technology will facilitate cooperation and networking among producers
570	Project	WB-CSA Index	The technology will foster local and regional production and supply chains
571	Project	WB-CSA Index	The intervention will provide opportunities for feedback from extension workers
572	Project	WB-CSA Index	The CSA service will narrow existing power differentials in the community
573	Project	WB-CSA Index	The technology will contribute to reducing existing gender inequalities
574	Project	WB-CSA Index	The technology will increase the resilience of the cropping system to drought
575	Project	WB-CSA Index	The technology will increase the resilience of the livestock to drought
576	Project	WB-CSA Index	The technology meets emissions intensity targets
577	Project	WB-CSA Index	The technology sequesters carbon in comparison with current interventions in similar farming systems
578	Project	WB-CSA Index	Number of agricultural actors who adopted CSA practices promoted by the project
579	Project	WB-CSA Index	Land area where CSA practices have been adopted as a result of the project
580	Project	WB-CSA Index	Land area provided with new or improved irrigation and drainage services
581	Project	WB-CSA Index	Area restored or re/afforested as result of the project
582	Project	WB-CSA Index	Land area covered by forest
583	Project	WB-CSA Index	Land area under land uses or land cover
584	Project	WB-CSA Index	Number of livestock units subject to CSA practices as result of the project
585	Project	WB-CSA Index	Client days of training on CSA provided
586	Project	WB-CSA Index	Number of agricultural actors who use ICT services for obtaining information on weather and climate, CSA practices and market (price) information
587	Project	WB-CSA Index	Number of agricultural actors who are members of an association
588	Project	WB-CSA Index	Number of agricultural actors using: financial services of formal banking institutes or nonbank financial services
589	Project	WB-CSA Index	Number of agricultural actors employed in agriculture in the project area
590	Project	WB-CSA Index	Target population with use or ownership rights recorded as a result of the project
591	Project	WB-CSA Index	Annual total volume of groundwater and surface water withdrawal for agricultural use, expressed as a percentage of the total actual renewable water resources (in the project area)

592	Project	WB-CSA Index	Land area affected by medium to very strong/severe soil erosion in the project area
593	Project	WB-CSA Index	Net carbon balance (GHG emission in tons of CO <sub>2</sub> e emission/ha/year) of project
594	Project	WB-CSA Index	GHG emission intensity
595	Project	WB-CSA Index	Crop yield in kilograms per hectare and year as result of the project's CSA intervention
596	Project	WB-CSA Index	Yield variability per hectare and year and crop
597	Project	WB-CSA Index	Yield per livestock unit and year as result of project
598	Project	WB-CSA Index	Annual household income from agricultural activity
599	Project	WB-CSA Index	Number of beneficiaries who consider themselves better off now than before the intervention