



Delivering on the Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods in Africa

**Document for preparing country Biennial Review report on progress made
for achieving the Malabo Declaration Goals and Targets**

Technical Guidelines

March 2017

These guidelines have been prepared to support African Union Member States in preparing their agricultural transformation reports to the African Union Summit on progress made for implementing Commitments in the June 2014 AU Heads of States Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. They had been prepared through consultative actions led by the African Union Commission (AUC) and the NEPAD Planning and Coordination Agency (NPCA), that have involved technical partners' engagement in offering available knowledge for developing computing methods for reporting on each of the indicators that reflected commitments made in the Malabo Declaration. This version of the Guidelines has been finalized after the Experts Groups meeting held in Dakar in September 2016 for consolidating and refining parameters and computing methods of the indicators profiles.

Acknowledgments to technical partners institutions namely ReSAKSS, IFPRI, AGRA, FARA, FAO, Africa Lead, World Bank, GIZ, and USAID, as well as the Regional Economic Communities (RECs) and Member States for their technical, logistical and financial support to the process of developing the Guidelines.

Introduction

Under the process of implementing the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods in Africa, the African Union Commission (AUC) is leading the establishment of the Biennial Review (BR) mechanism for regular country progress reporting to the African Union (AU) Assembly. The BR mechanism aims at providing platform for mutual accountability, peer review and peer learning that will motivate increased performances of each member state to deliver on targets set in the Malabo declaration, through a well-designed, transparent and performance-based Monitoring and Evaluation (M&E) and Biennial Review Reporting to the AU Assembly, that should in turn, trigger evidence based planning and implementation at all appropriate levels (national, sub regional and continental) for the expected agricultural growth and transformation in Africa.

Agreements have been reached to adopt a Scorecard format for presenting the biennial report to the AU Assembly to create higher incentive on the Malabo goals and highlight individual country progress with related scores. This requires clarity and transparency in defining performance targets, indicators and required parameters in a way to ensure alignment with commitments made in the Malabo Declaration.

The tool for collecting information from the countries, which will serve as country reporting template, prioritises 23 performance categories and 43 indicators (for the 2017 Country Progress Report) to be tracked and reported upon by the AU member states.

This document provides details of the definitions that apply vis-à-vis the indicators to be used for monitoring progress on the targets set. It is recognised that there are existing agricultural sector monitoring and evaluation (M&E) systems at national, regional, continental and global level using similar indicators to provide information on the performance categories. However, the purposes for which that information is generated differ; which in turn influence the definition of indicators used and the specific parameters that are measured.

For the AU biennial review, the indicators chosen to track the prioritised performance categories are defined on the basis of the strategic objectives that are derived from the Malabo Declaration. They are thus adapted from existing modes of application taking into consideration the unique situation of the opportunities and challenges in Africa's agricultural sector and its multisectorial implications, especially with regard to data acquisition and analysis. As such, the following background information and or instructions are provided:

1. **Objectives of Performance Category/Indicator:** this provides the primary objective of generating the requested information on a performance category or a specific indicator. In essence, this section is aimed at demonstrating relevance and highlighting the point of emphasis in the analysis.
2. **Performance Target:** this section states the set target against which performance is being measured. In addition, it provides information on the reference policy document(s) and/or methodology from which the target is derived.
3. **Performance Indicator:** defines the measure by which progress towards a specific target and/or strategic goal of Malabo commitments is evaluated.
4. **Disaggregation:** this section defines the various parameters used to compute the performance indicator, as well as describing both the required data and applicable computing methods. Suggestions are also given on the possible sources for the required data.
5. **Indicator Computing:** describing the formula(e) and or other processes for manipulating the various parameters to evaluate progress on a particular target or objective.

These background information and /or instructions are summarized on sheets clustered in *Section II*, by theme for each of the 7 themes defined by the actionable commitments made in the Malabo Declaration, whereas the *Section I* provide the overview of the core set of indicators used in the Reporting Template to be availed to Member States for preparing respective country report.

It must be emphasised that the indicators, parameters, definitions and methods used in what follows are neither exhaustive nor absolute, rather they have been carefully selected and applied within the context of the agriculture sector in Africa. Similarly, these guidelines are the first version of what has purposely been developed to be a living document.

Section I

**The minimum core set of indicators for monitoring
Commitments of the Malabo Declaration.**

Key Performance Targets and Indicators for Monitoring and Reporting on the June 2014 AU Assembly Malabo Declaration for Agriculture Growth in Africa

Themes/ Performance Areas	Sub-themes/ Performance Category	Concerns/ Objectives of the Category	Performances Indicators						Existing Int. data Sources	Comments
			Item (What is measured)	Targets (Where to reach)	Baseline Year	Milestone Year	Reference	M&E Level		
1. Commitment to CAADP Process	1.1 Country CAADP Process	Develop/update national Plans for implementing Malabo declaration using CAADP implementation approach under inclusive and participatory process.	1.1- CAADP Process Completion Index (CAADPPPro).	100%	2015	2018	Malabo Decl. 1(a) & 1(e)	Country, AUC*, NEPAD*		
	1.2 CAADP based Cooperation, Partnership & Alliance	Strengthen multi-sector coordination among stakeholders to improve implementation towards results, through establishment of a functional multi-sectorial and multi-stakeholder coordination body.	1.2- Existence of, and Quality of multi-sectorial and multi-stakeholder coordination body (Qc).	100%	2015	2018	Malabo Decl. 1(b) & 1(d)	Country, RECs		
	1.3 CAADP based Policy & Institutional Review/ Setting/ Support	Strengthen existing agricultural policies and institutional settings to successfully implement NAIPs to achieve Malabo Declaration goals and targets.	1.3- Evidence-based policies, supportive institutions and corresponding human resources (EIP).	100%	2015	2018	Malabo Decl. 1(c), 2(b), 3(a), 6(c)	Country, AUC*, NEPAD*		
2. Investment Finance in Agriculture	2.1 Public Expenditures to Agriculture	Allocate enough funds for agriculture in national budgets.	2.1i- Public agriculture expenditure as share of total public expenditure (tPAE).	10%	2015	2025	Malabo Decl. 2(a)	Country	ReSAKSS	
			2.1.ii- Public Agriculture Expenditure as % of agriculture value added (PAEAgGDP).	19%	2015	2025	Malabo Decl. 2(a)	Country		
			2.1iii- ODA disbursed to agriculture as % of commitment (ODA).	100%	2015	2025	Malabo Decl. 2(a)	Country		
	2.2 Domestic Private Sector Investment in Agriculture.	Put in place or strengthen mechanisms to attract domestic private investment in agriculture.	2.2- Ratio of domestic private sector investment to public investment in agriculture (tDPrPb).	on search	2015	2025	Malabo Decl. 2(b)	Country	Average of top 10 ratios of tDPrPb will be used to set target once data are available	
	2.3 Foreign Private Sector Investment in Agriculture.	Put in place or strengthen mechanisms to attract foreign private direct investment in agriculture.	2.3- Ratio of foreign private direct investment to public investment in agriculture (tFPrPb).	on search	2015	2025	Malabo Decl. 2(b)	Country, AUC, RECs, NEPAD	IFPRI, FAO Average of top 10 ratios of FPrPb will be used to set target once data are available	
2.4 Access to finance	Increase access of smallholder farmers/rural households to and use of financial services for the purposes of transacting agricultural business (purchasing inputs, machinery, storage technologies, etc.)	2.4- Proportion of men and women engaged in agriculture with access to financial services, (tAgFs).	100%	2015	2025	Malabo Decl. 2(c) and SDG goal1, 1.4	Country			

Themes/ Performance Areas	Sub-themes/ Performance Category	Concerns/ Objectives of the Category	Performances Indicators						Existing Int. data Sources	Comments
			Item (What is measured)	Targets (Where to reach)	Baseline Year	Milestone Year	Reference	M&E Level		
3. Ending Hunger	3.1 Access to Agriculture inputs and technologies	Promote utilization of cost-effective & quality agricultural inputs, irrigation, mechanization, and agrochemicals for crops, fisheries, livestock and forestry to boost agricultural productivity.	3.1i- Fertilizer consumption (kilogram of nutrients per hectare of arable land), (Fz)	50 kilograms per hectare of arable land	2015	2025	Malabo Decl. 3(a)	Country		
			3.1ii- Growth rate of the size of irrigated areas from its value of the year 2000 (RiIA).	100%	2000	2025	Malabo Decl. 3(a) + African Water Vision 2025	Country		
			3.1iii- Growth rate of the ratio of supplied quality agriculture inputs (seed, breed, fingerlings) to the total national inputs requirements for the commodity (tAgI).	100%	2015	2025	Malabo Decl. 3(a)	Country	Target will be set once data are available	
			3.1iv- Proportion of farmers having access to Agricultural Advisory Services (FAgAS).	100%	2015	2025	Malabo Decl. 3(a) + SDG	Country		
			3.1v- Total Agricultural Research Spending as a share of AgGDP (tTARS).	1%	2015	2025	Malabo Decl. 3(a)	Country		
			3.1vi- Proportion of farm households with ownership or secure land rights (tHhSL).	100%	2015	2025	Malabo Decl. 3(a)	Country		
	3.2 Agricultural Productivity	Increase agricultural productivity.	3.2i- Growth rate of agriculture value added, in constant US dollars, per agricultural worker (tAgW)	100%	2015	2025	Malabo Decl. 3(a)	Country		
			3.2ii- Growth rate of agriculture value added, in constant US dollar, per hectare of agricultural arable land (tAgL).	100%	2015	2025	Malabo Decl. 3(a)	Country		
			3.2iii- Growth rate of yields for the 5 national priority commodities, and possibly for the 11 AU agriculture priority commodities (tY).	100%	2015	2025	Malabo Decl. 3(a)	Country		
	3.3 Post-Harvest Loss	Provide logistics support to all stages of the food production chain (field/harvest, storage, processing, transportation, final retail market) to limit degradation both in quantity and in quality of the produced food.	3.3- Reduction rate of Post-Harvest Losses for (at least) the 5 national priority commodities, and possibly for the 11 AU agriculture priority commodities (tPHL).	50%	2015	2025	Malabo Decl. 3(b)	Country	FAO, APHLIS	

Themes/ Performance Areas	Sub-themes/ Performance Category	Concerns/ Objectives of the Category	Performances Indicators						Existing Int. data Sources	Comments
			Item (What is measured)	Targets (Where to reach)	Baseline Year	Milestone Year	Reference	M&E Level		
3. Ending Hunger ... cont	3.4 Social Protection	Integrate measures for increased agricultural productivity with social protection initiatives focusing on vulnerable social groups through committing targeted budget lines within our national budgets for social protection.	3.4- Budget lines (%) on social protection as percentage of the total resource requirements for coverage of the vulnerable social groups (tSP)	100%	2015	2025	Malabo Decl. 3(c)	Country		
	3.5 Food security and Nutrition	Promote initiatives to improve nutritional status, and in particular, the elimination of hunger and child under nutrition in Africa, by bringing down child stunting, child underweight, child wasting, and child undernourishment; and improving dietary diversity for women and children.	3.5i- Prevalence of stunting (% of children under 5 years old) (St)	10%	2015	2025	Malabo Decl. 3(d) and the ARNS	Country	DHS, WDI, WFI, WHO, UNICEF, IFPRI	
			3.5ii- Prevalence of underweight (% of children under 5 years old) (Uw)	5%	2015	2025	Malabo Decl. 3(d) and the ARNS	Country	DHS, WDI, WFI, WHO, UNICEF, IFPRI	
			3.5iii- Prevalence of wasting (% of children under 5 old) (W)	5%	2015	2025	Malabo Decl. 3(d) and the ARNS	Country	DHS, WDI, WFI, WHO, UNICEF, IFPRI	
			3.5iv- Proportion of the population that is undernourished (% of the country's population) (U).	5%	2015	2025	Malabo Decl. 3(d) and the ARNS	Country	DHS, WDI, WFI, WHO, UNICEF, IFPRI	
			3.5v- Growth rate of the proportion of Minimum Dietary Diversity-Women (tMDDW)	50%	2015	2025	Malabo Decl. 3(d) and the ARNS	Country	DHS, WDI, WFI, WHO, UNICEF, IFPRI	
			3.5vi- Proportion of 6-23 months old children who meet the Minimum Acceptable Diet (MAD)	50%	2015	2025	Malabo Decl. 3(d) and the ARNS	Country	DHS, WDI, WFI, WHO, UNICEF, IFPRI	
	4.1 Agricultural GDP and Poverty Reduction	Sustain annual agriculture sector growth by ensuring higher contribution to GDP and to poverty reduction.	4.1i- Growth rate of the agriculture value added, in constant US dollars (tAgGDP).	6%	2015	2025	Malabo Decl. 4(a)	Country	IFPRI	
			4.1ii- Agriculture contribution to the overall poverty reduction target (Stand-by)	50%	2015	2025	Malabo Decl. 4(a)	Country	IFPRI	Further work to calculate the indicator
			4.1iii- Reduction rate of poverty headcount ratio, at national poverty line (% of population), dpovN	50%	2015	2025	Malabo Decl. 4(a)	Country	IFPRI	
4.1iv- Reduction rate of poverty headcount ratio at international poverty line (% of population), dpovI			50%	2015	2025	Malabo Decl. 4(a)	Country	IFPRI		

Themes/ Performance Areas	Sub-themes/ Performance Category	Concerns/ Objectives of the Category	Performances Indicators						Existing Int. data Sources	Comments
			Item (What is measured)	Targets (Where to reach)	Baseline Year	Milestone Year	Reference	M&E Level		
4. Eradicating Poverty through Agriculture			4.1v- Reduction rate of the gap between the wholesale price and farmgate price (tfgws)	50%	2015	2025	Malabo Decl. 4(a)	Country	IFPRI	
	4.2 Inclusive PPPs for commodity value chains	Promote approaches via PPP arrangements to link smallholder farmers to value chains of priority agricultural commodities.	4.2- Number of priority agricultural commodity value chains for which a PPP is established with strong linkage to smallholder agriculture, (Nc)	5	2015	2025	Malabo Decl. 4(b)	Country		
	4.3 Youth job in agriculture	Engage youth in agricultural sector development to contribute to reduce level of unemployment and poverty .	4.3- Percentage of youth that is engaged in new job opportunities in agriculture value chains, (tYth)	30%	2015	2025	Malabo Decl. 4(c)	Country	UNIDO, ILO	
	4.4 Women participation in Agri-business	Promote initiatives that facilitate preferential entry and participation for women in gainful and attractive agri-business opportunities.	4.4- Proportion of rural women that are empowered in agriculture, (tWE)	20%	2013	2023	Malabo Decl. 4(d) + FTYIP of the AU Agenda 2063	Country		
5. Intra-African Trade in Agriculture Commodities and services	5.1 Intra-African Trade in agriculture commodities and services	Promote intra-African trade in agriculture commodities and services while reducing importation of those commodities from outside Africa.	5.1- Growth rate of the value of trade of agricultural commodities and services within Africa, in constant US dollars (tIAT).	200%	2015	2025	Malabo Decl. 5(a) & 9(c)	Country/ RECs*/ AUC/ NEPAD	UNCTAD, FAOstat, RECs	
	5.2 Intra-African Trade Policies and institutional conditions	Create and enhance regional and continental policies and institutional conditions and support systems to simplify and formalize the current trade practices to permit the achievement of intra-African trade target; including the promotion of the African Common position on agriculture-related international trade negotiations and partnership agreements.	5.2i- Trade Facilitation Index (TFI)	100%	2015	2025	Malabo Decl. 5(b)	Country/ RECs/ AUC/ NEPAD	Further work to calculate the indicator	
			5.2ii- Domestic Food Price Volatility Index (CV)	7.5%	2015	2025	Malabo Decl. 5(b)	Country/ RECs/ AUC/ NEPAD		
6. Resilience to Climate Variability	6.1 Resilience to climate related risks	Promote initiatives of building resilience of production systems to reduce vulnerabilities of the livelihoods of African population to climate variability and other related risks.	6.1i- Percentage of farm, pastoral, and fisher households that are resilient to climate and weather related shocks (tRagHh)	30%	2015	2025	Malabo Decl. 6(a)	Country		
			6.1ii- Share of agriculture land under sustainable land management practices (SSLM)	30%	2015	2025	Malabo Decl. 6(a) + FTYIP of the AU Agenda 2063	Country		

Themes/ Performance Areas	Sub-themes/ Performance Category	Concerns/ Objectives of the Category	Performances Indicators						Existing Int. data Sources	Comments
			Item (What is measured)	Targets (Where to reach)	Baseline Year	Milestone Year	Reference	M&E Level		
	6.2 Investment in resilience building	Enhance investments for resilience building initiatives to protect rural workers and social groups, as well as vulnerable ecosystems.	6.2- Existence of government budget-lines to respond to spending needs on resilience building initiatives (EI _{RB})	100%	2015	2025	Malabo Decl. 6(b)	Country		
7. Mutual Accountability for Actions and Results	7.1 Country capacity for evidence based planning, impl. and M&E	Countries to increase capacity to generate, analyse and use data, information, knowlegde and innovations	7.1- Index of capacity to generate and use agriculture statistical data and information (ASCI)	63	2015	2025	Malabo Decl. 7(c)	AUC, RECs, NEPAD, Country	Target set as average of the 10 best ranked countries in the Africa Country	
	7.2 Peer Review and Mutual Accountability	Put in place mechanisms and systems to recognize and appreciate performance of Member States with respect to progress on key commitments agreed upon.	7.2- Existence of inclusive institutionalized mechanisms and platforms for mutual accountability and peer review (ECI).	100%	2015	2018	Malabo Decl. 7(b) & 9(d)	AUC, RECs, NEPAD, Country		
	7.3 Biennial Agriculture Review Process	Institutionalize the use of the Biennial report to serve mutual accountability platforms, experiences sharing amongst African countries on agricultural development issues, and promote lessons learnt for performing on Malabo Declaration.	7.3 Country Biennial Report submission (BR).	100%	2015	2025	Malabo Decl. 7(a) & 9(d,e,f,g)	AUC, RECs, NEPAD, Country		

Section II

The Detailed Guidelines for computing proposed performance indicators of the Country Reporting Template.

List of profiled Indicators for consideration in the Malabo Scorecard

Performance Indicators		Status of the profile
1.1	CAADP Process Completion Index (CAADPPro)	OK
1.2	Quality of multi-sectorial and multi-stakeholder coordination (Qc)	OK
1.3	Evidence-Informed Policies and corresponding human resources (EIP)	OK
2.1i	Public agriculture expenditure as share of total public expenditure (tPAE)	OK
2.1ii	Public Agriculture Expenditure as % of agriculture value added (PAEAgVA)	OK
2.1iii	ODA disbursed to agriculture as % of commitment (ODA)	OK
2.2	Ratio of domestic private sector investment to public investment in agriculture (tDPrPb)	OK, Silent on performance
2.3	Ratio of foreign private direct investment to public investment in agriculture (tFPrPb)	OK, Silent on performance
2.4	Proportion of men and women engaged in agriculture with access to financial services, (tAgFs)	OK
3.1i	Fertilizer consumption (kilogram of nutrients per hectare of arable land), (Fz)	OK
3.1ii	Growth rate of the size of irrigated areas from its value of the year 2000 (RiIA)	OK
3.1iii	Growth rate of the ratio of supplied quality agriculture inputs (seed, breed, fingerlings) to the total national inputs requirements for the commodity (tAgI)	OK
3.1iv	Proportion of farmers having access to Agricultural Advisory Services (FAGAS)	OK
3.1v	Total Agricultural Research Spending as a share of AgGDP (tTARS)	OK
3.1vi	Proportion of farm households with ownership or secure land rights (tHhSL)	OK
3.2i	Growth rate of agriculture value added, in constant US dollars, per agricultural worker (tAgW)	OK
3.2ii	Growth rate of agriculture value added, in constant US dollar, per hectare of agricultural arable land (tAgL)	OK
3.2iii	Growth rate of yields for the 5 national priority commodities, and possibly for the 11 AU agriculture priority commodities (tY)	OK
3.3	Reduction rate of Post-Harvest Losses for (at least) the 5 national priority commodities, and possibly for the 11 AU agriculture priority commodities (tPHL)	OK
3.4	Budget lines (%) on social protection as percentage of the total resource requirements for coverage of the vulnerable social groups (tSP)	OK
3.5i	Prevalence of stunting (% of children under 5 years old) (St)	OK
3.5ii	Prevalence of underweight (% of children under 5 years old) (Uw)	OK
3.5iii	Prevalence of wasting (% of children under 5 old) (W)	OK
3.5iv	Proportion of the population that is undernourished (% of the country's population) (U)	OK
3.5v	Growth rate of the proportion of Minimum Dietary Diversity-Women (tMDDW)	OK
3.5vi	Proportion of 6-23 months old children who meet the Minimum Acceptable Diet (MAD)	OK
4.1i	Growth rate of the agriculture value added, in constant US dollars (tAgGDP)	OK
4.1ii	Agriculture contribution to the overall poverty reduction target	Stand-by for more research ... SB
4.1iii	Reduction rate of poverty headcount ratio, at national poverty line (% of population), dpovN	OK
4.1iv	Reduction rate of poverty headcount ratio at international poverty line (% of population), dpovi	OK
4.1v	Reduction rate of the gap between the wholesale price and farmgate price (tfgws)	OK
4.2	Number of priority agricultural commodity value chains for which a PPP is established with strong linkage to smallholder agriculture, (Nc)	OK
4.3	Percentage of youth that is engaged in new job opportunities in agriculture value chains, (tYth)	OK
4.4	Proportion of rural women that are empowered in agriculture, (tWE)	OK
5.1	Growth rate of the value of trade of agricultural commodities and services within Africa, in constant US dollars (tIAT).	OK
5.2i	Trade Facilitation Index (TFI)	OK
5.2ii	Domestic Food Price Volatility Index (CV)	OK
6.1i	Percentage of farm, pastoral, and fisher households that are resilient to climate and weather related shocks (tRAGHh)	OK
6.1ii	Share of agriculture land under sustainable land management practices (SSLM)	OK
6.2	Existence of government budget-lines to respond to spending needs on resilience building initiatives (EIRB)	OK
7.1	Index of capacity to generate and use agriculture statistical data and information (ASCI)	OK
7.2	Existence of inclusive institutionalized mechanisms for mutual accountability and peer review (ECI)	OK
7.3	Country Biennial Report submission (BR)	OK

STATUS OF THE PROFILES: 40 OK; 2 OK but silent on performance ; 1 on Stand-by for more research

Performance theme 1:
Commitment to CAADP Process

Theme 1		Commitment to CAADP process			
Performance Category		PC 1.1 Country CAADP Process			
1. Objective of the PC	Develop/update national Plans for implementing Malabo declaration using CAADP implementation approach under inclusive and participatory process.				
2. Performance Target	CAADP process to be fully completed at the country level: <i>Reach 100% of the completion, by the year 2018.</i>				
	<i>Reference in the Malabo Declaration:</i> Malabo Decl. 1(a) & 1(e)				
3. Performance Indicator	Indicator	Definition / Explanation			
	CAADP Process Completion Index (CAADPPro).	The CAADPPRO is the measure of the level of country completion of the CAADP process in the country, through the level of availability of the necessary documents that justify the completion of each of the 4 main steps decided by the AUC and NPCA for rolling out implementation of Malabo declaration at country level. The 4 main steps include: (i)- the Step of Domestication, (ii)- the step of NAIP Appraisal, (iii)- the step of NAIP implementation; and (iv)- Step of NAIP M&E and reporting . This measure is based on the assumption that a ready document is enough to justify the successful completion of a particular step. Each step has a list of its proof documents that are weighted to compute the Indicator.			
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
	1. Communication on Internalizing CAADP	Existence of <i>communication (leaflet or any other tool)</i> developed by the Country as part of the "Domestication step" to promote implementation of Malabo Declaration, while involving national stakeholders.	- p ₁ : which is the status of completing this step by the country.	p ₁ is estimated with: - "No" = 0 - "Yes" = 100%	CAADP focal point, Ministry of Ag,
	2. National CAADP Roadmap	Existence of <i>national roadmap</i> prepared by the Country as part of the "Domestication step" to plan implementation of the Malabo.	- p ₂ : which is the status of completing and availing the roadmap.	p ₂ is estimated with: - "No" = 0 - "Yes" = 100%	CAADP focal point, Ministry of Ag,
	3. NAIP Appraisal Report	Existence of <i>NAIP appraisal report</i> with recommendations on necessary actions and programmatic elements to be considered by the Country to revise the existing NAIP to achieve Malabo targets.	- p ₃ : which is the status of completing and availing the NAIP appraisal report.	p ₃ is estimated with: - "No" = 0 - "Yes" = 100%	CAADP focal point, Ministry of Ag,
	4. New NAIP	Existence of <i>New NAIP</i> which is the revised NAIP that contains the programmatic elements (as per the recommendations of the appraisal report) to achieve targets of the Malabo Declaration.	- p ₄ : which is the status of completing and availing the new NAIP.	p ₄ is estimated with: - "No" = 0 - "Yes" = 100%	CAADP focal point, Ministry of Ag,
	5. NAIP implementation reflected in national budget	NAIP Implementation should make sure that the new NAIP is considered in annual planning process of the Country. The annual national Budget reflects programmatic activities and budgeting of the new NAIP.	- p ₅ : which is the percentage of the revised NAIP reflected in national budget.	p ₅ = (Cost of the revised NAIP reflected in the National Budget) / (Total Costs of the revised NAIP)	CAADP focal point, Ministry of Ag,
	6. NAIP M&E System	NAIP M&E is making sure that a <i>national NAIP M&E Framework</i> that involved stakeholders, has been put in place to regularly monitor implementation of the new NAIP.	- p ₆ : which is the status of establishing the NAIP M&E system.	p ₆ is estimated with: - "No" = 0 - "Yes" = 100%	CAADP focal point, Ministry of Ag,
	7. NAIP implementation progress Report	Existence of a regular <i>Annual NAIP's progress Report</i> .	- p ₇ : which is the status of availing the progress report.	p ₇ is estimated with: - "No" = 0 - "Yes" = 100%	CAADP focal point, Ministry of Ag,
5. Indicator Computing	For a given year, the CAADP process completion Index in %, is : $CAADPPro = \text{Average}(p_i)_{i=1 \text{ to } 7}$				

Theme 1 *Commitment to CAADP process*

Performance Category **PC 1.2 CAADP based Cooperation, Partnership & Alliance**

1. Objective of the PC Strengthen multi-sector coordination among stakeholders to improve implementation towards results, through establishment of a functional multi-sectorial and multi-stakeholder coordination body.

2. Performance Target **Multi-sectorial coordination body and multi-stakeholder body fully established and operational at national level (reach 100% for the Quality of multi-sectorial and multi-stakeholder coordination body, Qc) by 2018.**
Reference in the Malabo Declaration: Malabo Decl. 7(b)

Indicator	Definition / Explanation
Existence of, and Quality of multi-sectorial and multi-stakeholder coordination body (Qc).	Multi-sectorial coordination means a situation where various agencies of government (e.g Agriculture, Education, Health, Nutrition, Water and Sanitation, Social protection, Works, Finance, Lands, Social Welfare, and Protection, etc) work together towards a common objective. Multi-stakeholder coordination means that several stakeholders including government, CSOs, private sector, farmers organizations, youth and women work together through a coordinated platform to make and implement decisions that drive the national agricultural investment plan (e.g. Agricultural sector working group). The quality of multi-sectorial and multi-stakeholder coordination is assessed by several parameters, including broadness, inclusiveness, participatory, and openness.

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Existence of quality terms of reference: Qc ₁	The quality terms of reference of the multi-sectorial and multi-stakeholder coordination body is the document that clarifies: i) the objectives of the coordination body and how they are aligned to driving the sector; ii) the roles and responsibilities of involved stakeholders with their relevance; iii) the relevance to the sector; iv) the roadmap and budget of the coordination actions. This parameter is weighed at $w_1 = 10\%$	- Existence of the TORs, p _{TOR1} - Reflection of the key elements, p _{TOR2} (Elements: i. alignment of the objectives; ii. Roles and responsibilities; iii. Roadmap; iv. Budget) -Representation of stakeholders, p _{TOR3} (Stakeholders categories: i. Government, ii.CSOs, iii. Private sector, iv. Farmers, and v. Farmer organizations) - Relevance of membership, p _{TOR4} - Existence of List of official nominees (number + seniority) and affiliation, p _{TOR5}	- p _{TOR1} is estimated with "No"=0 and "Yes"=100% - p _{TOR2} is in (%) the number of elements (of the 4 listed) reflected in the TORs divided by 4. - p _{TOR3} is in (%) the number of category (of the 5 listed) reflected in the TORs divided by 5. - p _{TOR4} is in (%) the number of relevant members (accordingly to national stakeholders' perception) divided by total number of members. - p _{TOR5} is estimated with "No"=0 and "Yes"=1 <i>The Existence of quality terms of reference is estimated with: Qc₁ = average (p_{TOR(i)})</i>	CAADP focal point, Ministry of Ag, Country teams
2. Level of implementation of the coordination actions Qc ₂	This measures progress in implementing coordinations actions reflected in the TORs. The measure here is limited to the level of stakeholders involvement through engagement with stakeholders to hold all the coordination meetings planned in the TORs. It is weighed at $w_2 = 25\%$	-Total number of meetings planned in the TORs for the evaluation period, N _{MT} - Total number of meetings organized during the evaluation period, N _{MO} - The number of invitations received by the stakeholders for each meeting, N _{INI(i)} - The total number of required participants in the TORs, N _{INT}	- The Performance for meetings held (%) is: $p_{IMP1} = N_{MO}/N_{MT}$ - For each meeting organized, the level of engagement is $p_{IMP2(i)} = N_{INI(i)} / N_{INT}$. The overall level of engagement p_{IMP2} is the average of all $p_{IMP2(i)}$ for all the meetings organized. <i>The Level of implementation of the coordination actions is estimated with: Qc₂ = (p_{IMP1} + p_{IMP2})/2</i>	CAADP focal point, Ministry of Ag, Country teams
3. Level of participation and inclusiveness Qc ₃	This measures the level of participation of all the organizations listed in the TORs as stakeholders of the coordination process. It is weighed at $w_3 = 25\%$	- Total number of organizations, N _{ORG} -Total number of meetings organized, N _{MO} - Number of organizations present at each meeting, N _{ORGj}	<i>The Level of Participation and inclusiveness is calculated with: Qc₃ = $\sum(N_{ORGj}) / (N_{ORG} \times N_{MO})$</i>	CAADP focal point, Ministry of Ag,
4. Level of commitment to decisions, Qc ₄	This measures the level of implementation (through translation in decisions) of recommendations made under the coordination mechanism. It is weighed at $w_4 = 20\%$	- Total number of recommendations taken during the evaluation period, N _{RT} - Total number of decisions taken with out of the number of recommendations during the evaluation period, N _{DT} -Number of decisions implemented, N _{DI}	<i>The level of commitment to decisions is calculated with: Qc₄ = (N_{DI} / N_{RT})</i>	CAADP focal point, Ministry of Ag,
5. Level of Representation, Qc ₅	This measures the level of representation of the organisations in term of seniority attendance, at each of the meetings organized under the coordination mechanism. It is weighed at $w_5 = 20\%$	- Total expected senior attendances per meeting as reflected in the list of official nominees (number + seniority) in TORs for the involved organizations, T _{SA} - Total number of meetings organized during the evaluation period, N _{MO} - Observed senior attendances at each meeting, O _{SAI}	- For each meeting organized, the level of representation is $Qc_{5(i)} = O_{SAI(i)} / T_{SA}$. <i>The Level of Representation is estimated with: Qc₅ = average (Qc_{5(i)}) or Qc₅ = $\sum O_{SAI(i)} / (N_{MO} \times T_{SA})$</i>	CAADP focal point, Ministry of Ag, Country teams

5. Indicator Computing For a given year, the **Existence of, and Quality of multi-sectorial and multi-stakeholder coordination body** in %, is :
 $Qc = \sum(Qc_i \times w_i)_{i=1 \text{ to } 5}$

Theme 1		Commitment to CAADP process		
Performance Category		PC 1.3 CAADP based Policy & Institutional Review/ Setting/ Support		
1. Objective of the PC	Strengthen existing agricultural policies and institutional settings to successfully implement NAIPs to achieve Malabo Declaration goals and targets.			
2. Performance Target	<p>Evidence-based policies and institutions that support planning and implementation are established and implemented by the country to deliver on Malabo (reach 100% for the Evidence-based policies, supportive institutions and corresponding human resources, EIP) by 2018.</p> <p><i>Reference in the Malabo Declaration:</i> Malabo Decl. 1(c), 2(b), 3(a) & 7(c)</p>			
3. Performance Indicator	Indicator	Definition / Explanation		
	Evidence-based policies, supportive institutions and corresponding human resources (EIP).	This indicator assesses three things: (i) the extent to which policies guiding the implementation of the NAIP are based on evidence; (ii) existence of supportive institutions; and, (iii) adequacy of human resources to implement the NAIP.		
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods
	1. Evidence-based policies and strategies evidence: EPE	Extent to which policies, strategies and plans of the agricultural sector are anchored on evidence	<ul style="list-style-type: none"> Total number of policies and strategies in the NAIP (TNP) Number of policies and strategies that are evidence-based (NEP) Assessment through Experts opinion surveys on the extent to which policies and strategies are evidence based.	The Evidence-based policies will be given by: $EPE = (NEP/TNP) \times 100$
	2. Supportive institutions (laws and regulations): EPI	Extent to which existing institutions (laws and regulations) are adequate to support implementation of the NAIP	<ul style="list-style-type: none"> Number of policies and strategies elements in the NAIP that require supportive institutions (laws and regulations) (NRI) Number of institutions (laws and regulations) that exist to support policies and strategies (NIP). 	Country score will be given by: $EPI = (NIP/NRI) \times 100$
	3. Full-time equivalent staff dedicated to agricultural policy planning, implementation and M&E within the Ministry of agriculture: FTE	Adequacy (numbers and capacity) of full-time equivalent professionals dedicated to agricultural policy planning, implementation and M&E within the Ministry of agriculture	Professional personnel engaged calculated as equivalent full-time. <ul style="list-style-type: none"> Number of required fulltime staff positions for planning and M&E (FTP) Number of staffing positions filled (FTS) 	$FTE = (FTS/FTP) \times 100$
5. Indicator Computing	For a given year, the Evidence-based policies, supportive institutions and corresponding human resources, is $EIP = (EPE + EPI + FTE)/3$			

Performance theme 2:
Investment Finance in
Agriculture

Theme 2 *Investment Finance in Agriculture*

Performance Category **PC 2.1i Public Expenditures to Agriculture**

1. Objective of the PC Allocate enough funds for agriculture in national budgets.

2. Performance Target **Increase public expenditures to agriculture as part of national expenditures, to at least 10% from the year 2015 to 2025.**
Reference in the Malabo Declaration: *Malabo Decl. 2(a)*

Indicator	Definition / Explanation
Public agriculture expenditure as share of total public expenditure (tPAE).	As adopted in Maputo in 2003 and Malabo in 2014, AU Heads of State and Government committed to allocate at least 10% of annual public expenditures to agriculture. The AU/NEPAD Guidance Note validated in 2015 on the "Enhanced Measurement and Tracking of Government Expenditure for Agriculture and its Quality in Africa Countries" provides background on the composition of the agriculture sector and constitution of agriculture expenditure, thereby making clearer country progress toward compliance of the 10% agriculture expenditure target, and the rationale for appropriate levels of spending; and (2) the improvements in the quality of spending.

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Total Public Expenditure in local currency unit (lcu): TPE	Expenses incurred in providing nonmarket or public goods and services to the country. This is limited in this profile to the expenses for the General government sector, described below:	Expenses incurred in performing the different <i>i</i> functions of government (e.g. administration, economic, infrastructure, social, and public safety) based on the Classification of the Functions of Government (COFOG) and categorized according to <i>j</i> economic uses: (1) compensation of employees, (2) use of goods and services, (3) consumption of fixed capital, (4) interest, (5) subsidies, (6) grants, (7) social benefits, and (8) miscellaneous other expense. [<i>E_{ij}</i>].	$TPE = \sum [TGE_{ij}]$	IMF Government Finance Statistics (GFS) Manual; AU Guidance note
	- General government sector, which includes central or federal, state, and local government units	Expenses incurred by the government sector in performing the different functions according to the different expenditure categories, also referred to as on-budget expenditure. [<i>TGE_{ij}</i>]	Add up expense for all functions by all economic uses. $\sum [TGE_{ij}]$	
2. Public Agriculture Expenditure in local currency units (lcu): PAE	Expenses incurred on a set of administrative, construction, and operational support activities related to the production of crops, livestock, forestry, and fishing. This is limited in this profile to the expenses of General government sector described below:	Expenses incurred in performing different <i>i</i> agricultural subfunctions (e.g. policy and planning, research, extension, irrigation, infrastructure and marketing, farm support, other) according to the above <i>j</i> economic uses in the <i>k</i> agricultural subsectors [<i>E_{ijk}</i>]. Notes: The main issue here is to identify the various agricultural subfunction performed by different public sector agents, considering multi-functional development projects as discussed in the AU Guidance Note.	$PAE = \sum [GAE_{ij}]$	IMF Government Finance Statistics (GFS) Manual; AU Guidance note
	- General government sector, which includes central or federal, state, and local government units.	Expenses incurred by the government sector in performing the different agriculture subfunctions according to the different expenditure categories, also referred to as on-budget expenditure. [<i>GAE_{ijk}</i>]	Add up expense for all subfunctions by all economic uses in all subsectors. $\sum [GAE_{ijk}]$	

5. Indicator Computing For a given year (t), **public agriculture expenditure as share of total public expenditure** (in %), is:
tPAE = PAE x 100 / TPE

Theme 2
Investment Finance in Agriculture
Performance Category **PC 2.1ii** **Public Expenditures to Agriculture**
1. Objective of the PC

Allocate enough funds for agriculture in national budgets.

2. Performance Target

Ensure adequate intensity of agricultural spending by keeping annual public agriculture expenditure as % of agriculture value added to no less than (or at a minimum of) 19% from the year 2015 to the year 2025.

Reference in the Malabo Declaration:
Malabo Decl. 2(a).... Average of top 10 ratios of GAEAgGDP
3. Performance Indicator

Indicator	Definition / Explanation
Public Agriculture Expenditure as % of agriculture value added (PAE_{AgGDP}).	It is a measure of agricultural spending intensity ratio, which is a more relevant measure of a country's agricultural expenditure commitment and of placing it within a continent-wide or an international context.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Public Agriculture Expenditure in local currency units (lcu): PAE	Refer to Profile PC 3.2 i		PAE	
2. Agriculture Value Added (lcu): $AgGDP$	Refer to Profile PC 3.2 i		$AgGDP$	

5. Indicator Computing

 For a given year, the Public Agriculture Expenditure as % of agriculture value added, $PAE_{AgGDP} = PAE \times 100 / AgGDP$

Theme 2

Investment Finance in Agriculture

 Performance Category **PC 2.1iii Public Expenditures to Agriculture**

 1. Objective of the PC

Allocate enough funds for agriculture in national budgets. It is also intended to ensure donors are delivering on their financial commitments to support national plans

 2. Performance Target

Ensure that Official Development Assistance (ODA) committed to implement the NAIPs is fully disbursed to countries. The target is to have 100% ODA disbursement annually from 2015 to 2025.

Reference in the Malabo Declaration:

Malabo Decl. 2(a)

 3. Performance Indicator

Indicator	Definition / Explanation
ODA disbursed to agriculture as % of commitment (ODA).	This Indicator measures donor commitments to ensure that what is committed is actually disbursed to countries to implement NAIPs. It also measures what is actually disbursed and spent in country on the investment plans, as opposed to what is committed and spent at donor headquarters, or what is spent in country but not aligned with investment plans.

 4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Official Development Assistance (ODA) for agriculture, livestock, forestry, and fishery, gross disbursements (US\$): $agODAD$	Actual ODA disbursed for activities related to the production of crops, livestock, forestry, and fishery.	Actual ODA disbursed by all donors through all channels in performing different i agricultural subfunctions (e.g. policy and planning, research, extension, irrigation, marketing, farm support, other) in the k agricultural subsectors [$agODAD_{ik}$]. Notes: Channels include public sector, public private partnership, multilateral organizations, NGOs and civil society, etc.	Add up ODA disbursed for all subfunctions in all subsectors. $\sum[agODAD_{ik}]$	OECD Creditor Reporting System (CRS); National data sources.
2. ODA for agriculture, livestock, forestry, and fishery, commitments (US\$): $agODAC$	ODA commitments made to support activities related to the production of crops, livestock, forestry, and fishery.	ODA commitments made by all donors through all channels to support performance of different i agricultural subfunctions (e.g. policy and planning, research, extension, irrigation, marketing, farm support, other) in the k agricultural subsectors [$agODAC_{ik}$]	Add up ODA commitments for all subfunctions in all subsectors. $\sum[agODAC_{ik}]$	OECD Creditor Reporting System (CRS) and Country Disbursement Figures as contained in National databases

 5. Indicator Computing

For a given year, ODA disbursed to agriculture as % of commitment, is $ODA = agODAD \times 100 / agODAC$.

Theme 2		Investment Finance in Agriculture		
Performance Category		PC 2.2 Domestic Private Sector Investment in Agriculture.		
1. Objective of the PC	Put in place or strengthen mechanisms to attract <u>domestic private investment</u> in agriculture.			
2. Performance Target	Ensure that government investment leverage at least X times domestic private investment in agriculture sector by 2025.			
	<i>Reference in the Malabo Declaration:</i> Malabo Decl. 2(b) Average of top 10 ratios of \downarrow DPrPb			
3. Performance Indicator	Indicator	Definition / Explanation		
	Ratio of domestic private sector investment to government investment in agriculture (\downarrow DPrPb). SILENT	Private sector Investment is defined as any use of private sector resources intended to increase future production output or income, to improve the sustainable use of agriculture-related natural resources (soil, water, etc.), to improve water or land management, etc. Increased investment is the predominate source of economic growth in the agricultural and other economic sectors. Private sector investment is critical because it indicates that the investment is perceived by private agents to provide a positive financial return and therefore is likely to lead to sustainable increases in agricultural production. It shows the relative domestic private investments DPria that are leveraged by public investments (GAE) in the agricultural sector.		
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods
	1. Total Agricultural Investments, TAI	It is composed of all investments in the agricultural sector that includes government expenditure in agriculture, domestic private investment, foreign direct investment, and official development assistance and other sources of official flows. TAI data can be availed by country statistics.	TAI data can be availed by country statistics.	TAI
	2. Government Agriculture Expenditure (Icu), GAE	Expense incurred on a set of administrative, construction, and operational support activities related to the production of crops, livestock, forestry, and fishing... <u>as defined in profile PC 2.1i</u>	GAE data can be availed by country statistics.	GAE
	3. Official Development Assistance (ODA) for agriculture, forestry, and fishing, gross disbursements, agODAD	Actual ODA disbursed for activities related to the production of crops, livestock, forestry, and fishing ... <u>as defined in profile PC 2.1iii</u>	GAE data can be availed by country statistics.	agODAD
	4. Foreign Direct Investment, FDI	Foreign private sector direct investment (FDI)	FDI data can be availed by country statistics.	FDI
	5. Domestic Private Investment in Agriculture, DPrIA	Composed of investment oriented loans provided by the banking sector to the agricultural sector, as well as private equity investments.	- TAI - GAE - agODAD - FDI	DPrIA = TAI - GEA - agODAD - FDI
5. Indicator Computing	For a given year, the Ratio of domestic private sector investment to government investment in agriculture , is \downarrow DPrPb = (DPrIA / GAE) x 100.			

Theme 2 *Investment Finance in Agriculture*

Performance Category **PC 2.3 Foreign Private Sector Direct Investment in Agriculture.**

1. Objective of the PC Put in place or strengthen mechanisms to attract foreign private direct investment in agriculture.

2. Performance Target **Ensure that government investment leverage at least X times foreign private direct investment in agriculture sector by 2025.**
Reference in the Malabo Declaration: Malabo Decl. 2(b) Average of top 10 ratios of $\frac{tFPrPb}{GAE}$

3. Performance Indicator	Indicator	Definition / Explanation
	Ratio of foreign private direct investment to government investment in agriculture ($\frac{tFPrPb}{GAE}$). SILENT	Private sector Investment is defined as any use of private sector resources intended to increase future production output or income, to improve the sustainable use of agriculture-related natural resources (soil, water, etc.), to improve water or land management, etc. Increased investment is the predominate source of economic growth in the agricultural and other economic sectors. Private sector investment is critical because it indicates that the investment is perceived by private agents to provide a positive financial return and therefore is likely to lead to sustainable increases in agricultural production. It shows the relative foreign private investments FPRIA that are leveraged by public investments (GAE) in the agricultural sector.

4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
	1. Foreign Direct Investment, FDI	Foreign private sector direct investment (FDI) in agriculture.	FDI data can be availed by country statistics.	FDI	Government Monetary and Financial Statistics; FAO Statistical Division
	2. Government Agriculture Expenditure (Icu), GAE	Expense incurred on a set of administrative, construction, and operational support activities related to the production of crops, livestock, forestry, and fishing... <u>as defined in profile PC 2.1i</u>	GAE data can be availed by country statistics.	GAE	IMF Government Finance Statistics (GFS) Manual; AU Guidance note

5. Indicator Computing For a given year, the **Ratio of foreign private direct investment to public investment in agriculture**, is $\frac{tFPrPb}{GAE} = \frac{FDI}{GAE} \times 100$.

Theme 2		Investment Finance in Agriculture		
Performance Category		PC 2.4 Access to Finance		
1. Objective of the PC	Increase access of smallholder farmers/rural households to and use of financial services for the purposes of transacting agricultural business (purchasing inputs, machinery, storage technologies, etc.)			
2. Performance Target	Ensure that 100% of men and women engaged in agriculture have access to financial services to be able to transact agriculture business.			
	<i>Reference in the Malabo Declaration:</i>		Malabo Decl. 2(c) and SDG goal1, 1.4	
3. Performance Indicator	Indicator	Definition / Explanation		
	Proportion of men and women engaged in agriculture with access to financial services, (\dagger AgFs)	<p>Use of financial services is considered critical for increasing smallholder agricultural productivity. Financial services include savings accounts, credit, digital payments, microfinance, and insurance. The evidence is clear that women are less likely than men to use any of these services. Continued dependence on cash perpetuates the marginalization of the poor and inhibits their ability to take advantage of economic opportunities within and outside of agriculture as well as to absorb shocks without falling deeper into poverty.</p> <p>Men and women considered in this profile are any household member of 15 years and older.</p>		
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods
	1. Total number of men and women engaged in agriculture, $NtAg$	Total number number of men and women engaged in agriculture.	Basic demographics and poverty measurement (available through FII). - Total number of men engaged in agriculture, $NtAgM$ - Total number of women engaged in agriculture, $NtAgW$	$NtAg = NtAgM + NtAgW$
	2. Number of men and women engaged in agriculture that have access to financial services, $NfsAg$	Number of men and women engaged in agriculture who are financially included. Financial inclusion includes ownership of at least one of any financial service, including bank and non-bank financial institutions (bank and savings accounts), mobile money, etc.	- Number of men engaged in agriculture that have access to financial services, $NfsAgM$ - Number of women engaged in agriculture that have access to financial services, $NfsAgW$	$NfsAg = NfsAgM + NfsAgW$
5. Indicator	For a given year(t), the Proportion of men and women engaged in agriculture with access to financial services, is : $\dagger AgFs_t = 100 \times NfsAg / NtAg$			

Performance theme 3:
Ending Hunger

Theme 3
Ending Hunger
Performance Category **PC 3.1i Access to Agriculture inputs and technologies**
1. Objective of the PC

Promote utilization of cost-effective & quality agricultural inputs, irrigation, mechanization, and agrochemicals for crops, fisheries, livestock and forestry to boost agricultural productivity.

2. Performance Target

Ensure minimum use of fertilizer for African agriculture development at level of consumption of at least 50 kilograms per hectare of arable land, from 2015 to 2025.

Reference in the Malabo Declaration: *Malabo Decl. 3(a)*

3. Performance Indicator

Indicator	Definition / Explanation
Fertilizer consumption (kilogram of nutrients per hectare of arable land), (Fz)	Total Fertilizer Consumption (organic and/or inorganic) is divided by Arable Land and Permanent Crops Area to obtain Consumption in nutrients/Arable Land and Permanent Crops Area.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Total fertilizers consumption (N+P, N+P+K) in Kg, Fc	Quantity of Fertilizer in metric tons of plant nutrient consumed in agriculture by a country (FAO Code 5157)	Nitrogen Fertilizers (N total nutrients) (FAOSTAT code 3102) Phosphate Fertilizers (P205 total nutrients) (FAOSTAT code 3103) Potash Fertilizers (K20 total nutrients) (FAOSTAT code 3104)	Total fertilizers consumption (N+P, N+P+K): Different fertilizers reported are summed to obtain total fertilizers consumption. Fc Fc = Sum (Fci)	FAO
2. Arable Land and Permanent Crops in hectare, L	- Arable land is the land under temporary agricultural crops (multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. - Permanent crops is the land cultivated with long-term crops which do not have to be replanted for several years (such as cocoa and coffee); land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under "forest"). Permanent meadows and pastures are excluded from land under permanent crops.	<i>Arable land area (FAO Code 6621)</i> <i>Permanent crops area (FAOSTAT code 6650)</i>	<i>Total Fertilizer Consumption is divided by Arable Land and Permanent Crops Area to obtain Consumption in nutrients/Arable Land and Permanent Crops Area; L_i</i> L = Sum (L_i)	FAO

5. Indicator Computing

For any given year (t) the Fertilizer consumption (kilogram of nutrients per hectare of arable land), is given by the ratio **Fz = Fc / L**

Theme 3

Ending Hunger

Performance Category **PC 3.1ii Access to Agriculture inputs and technologies**

1. Objective of the PC

Promote utilization of cost-effective & quality agricultural inputs, irrigation, mechanization, and agrochemicals for crops, fisheries, livestock and forestry to boost agricultural productivity.

2. Performance Target

Increase the size of irrigated areas (as per its value observed in the year 2000), by 100% by the year 2025.

Reference in the Malabo Declaration:

African Water Vision 2025

3. Performance Indicator

Indicator	Definition / Explanation
Growth rate of the size of irrigated areas from the size of the year 2000 (RiIA).	The Irrigated areas (IA) is the total area equipped for irrigation. The growth rate of irrigated areas (RiIA) is the change (%) in its value in 2000.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Irrigated areas (IA ₂₀₀₀)	Total areas under irrigation in the country, as reported in the year 2000.	Identified areas in the country that are under irrigation in the year 2000.	Sum of all the recorded areas.	
2. Irrigated areas (IA _t)	Total areas under irrigation in the country, as reported for the year of the evaluation, the year t.	Identified areas in the country that are under irrigation in the year t.	Sum of all the recorded areas.	

5. Indicator Computing

For a given year(t), the Growth rate of the size of irrigated area (in %), is: $RiIA = 100 \times (IA_t - IA_{2000}) / IA_{2000}$

Theme 3		Ending Hunger																						
Performance Category		PC 3.1iii Access to Agriculture inputs and technologies																						
1. Objective of the PC	Promote utilization of cost-effective & quality agricultural inputs, irrigation, mechanization, and agrochemicals for crops, fisheries, livestock and forestry to boost agricultural productivity.																							
2. Performance Target	Double (100% increase) the current levels of quality agricultural inputs for crops (seed), livestock (breed), and fisheries (fingerlings), by the year 2025 from the year 2015.																							
	<i>Reference in the Malabo Declaration:</i>		Malabo Decl. 3(a)																					
3. Performance Indicator	<table border="1"> <thead> <tr> <th>Indicator</th> <th colspan="3">Definition / Explanation</th> </tr> </thead> <tbody> <tr> <td>Growth rate of the ratio of supplied quality agriculture inputs (seed, breed, fingerlings) to the total national inputs requirements for the commodity ($tAgI$).</td> <td colspan="3">Inputs (quality seed of improved varieties, improved breed, and improved fingerlings) supplied or sold compared to national input requirements. This is a measure of the extent to which quality inputs is utilized to boost production of the considered commodity.</td> </tr> </tbody> </table>				Indicator	Definition / Explanation			Growth rate of the ratio of supplied quality agriculture inputs (seed, breed, fingerlings) to the total national inputs requirements for the commodity ($tAgI$).	Inputs (quality seed of improved varieties, improved breed, and improved fingerlings) supplied or sold compared to national input requirements. This is a measure of the extent to which quality inputs is utilized to boost production of the considered commodity.														
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Total national quality agriculture inputs requirement for the considered commodity i (AgI_i)</td> <td> - Crops: the quantity of seed (of improved and local varieties) required to cultivate the total area of at least one selected crop from the 5 priority value chains. - Livestock (cattle, sheep, goat, pig): the total number of female cattle at a reproductive age. - Livestock (poultry): the total number of chicken. - Fish: the total capacity (in number of fish) of fish ponds. </td> <td> - Crops: *Total area cultivated using seed of improved and local varieties of the selected crop, AC_i *Recommended seed rate of the selected crop, Rs_i - Livestock (cattle, sheep, goat, pig): $NfcRa$ - Livestock (poultry): Nch - Fish: Cfp </td> <td> - Crops: $AgI_i = AC_i \times Rs_i$ - Livestock (cattle, sheep, goat, pig): $AgI_i = NfcRa$ - Livestock (poultry): $AgI_i = Nch$ - Fish: $AgI_i = Cfp$ </td> <td>National Statistics FAO</td> </tr> <tr> <td>2. Supplied quality agriculture inputs for the commodity i ($AgIS_i$)</td> <td> - Crops: Quality seed of improved varieties of the selected crop sold to farmers for planting. - Livestock (cattle, sheep, goat, pig): the number of female cattle at a reproductive age that are artificially inseminated. - Livestock (poultry): the number of Day Old Chicks (DOC) supplied or sold. - Fish: number of improved fingerlings supplied or sold. </td> <td> - Crops: *Total amount of quality seed of improved varieties sold for the commodity i, $QqSivS$ - Livestock (cattle, sheep, goat, pig): $NfcRal$ - Livestock (poultry): N_{DOC} - Fish: N_{Fgl} </td> <td> - Crops: $AgIS_i = QqSivS$ (counting) - Livestock (cattle, sheep, goat, pig): $AgIS_i = NfcRal$ - Livestock (poultry): $AgIS_i = N_{DOC}$ - Fish: $AgIS_i = N_{Fgl}$ </td> <td>National Statistics FAO</td> </tr> <tr> <td>3. Ratio of supplied quality agriculture inputs to the total national inputs requirements for the commodity (R_i)</td> <td> - Crops: Extent to which quality seed of improved varieties is used nationally by farmers. - Livestock (cattle, sheep, goat, pig): Extent to which improved breeds is used at national level by farmers. - Livestock (poultry): Extent to which the DOC are used at the national level by farmers. - Fish: Extent to which the improved fingerlings are used at the national level by farmers. </td> <td> - Crops: - Livestock (cattle, sheep, goat, pig): - Livestock (poultry): - Fish: AgI_i and $AgIS_i$ </td> <td> - Crops: - Livestock (cattle, sheep, goat, pig): - Livestock (poultry): - Fish: $R_i = AgIS_i / AgI_i$ </td> <td>FAOstat or national data</td> </tr> </tbody> </table>				Parameter/ Unit	Definition	Data required	Computing Methods	d. Source	1. Total national quality agriculture inputs requirement for the considered commodity i (AgI_i)	- Crops: the quantity of seed (of improved and local varieties) required to cultivate the total area of at least one selected crop from the 5 priority value chains. - Livestock (cattle, sheep, goat, pig): the total number of female cattle at a reproductive age. - Livestock (poultry): the total number of chicken. - Fish: the total capacity (in number of fish) of fish ponds.	- Crops: *Total area cultivated using seed of improved and local varieties of the selected crop, AC_i *Recommended seed rate of the selected crop, Rs_i - Livestock (cattle, sheep, goat, pig): $NfcRa$ - Livestock (poultry): Nch - Fish: Cfp	- Crops: $AgI_i = AC_i \times Rs_i$ - Livestock (cattle, sheep, goat, pig): $AgI_i = NfcRa$ - Livestock (poultry): $AgI_i = Nch$ - Fish: $AgI_i = Cfp$	National Statistics FAO	2. 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Parameter/ Unit	Definition	Data required	Computing Methods	d. Source																				
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2. Supplied quality agriculture inputs for the commodity i ($AgIS_i$)	- Crops: Quality seed of improved varieties of the selected crop sold to farmers for planting. - Livestock (cattle, sheep, goat, pig): the number of female cattle at a reproductive age that are artificially inseminated. - Livestock (poultry): the number of Day Old Chicks (DOC) supplied or sold. - Fish: number of improved fingerlings supplied or sold.	- Crops: *Total amount of quality seed of improved varieties sold for the commodity i , $QqSivS$ - Livestock (cattle, sheep, goat, pig): $NfcRal$ - Livestock (poultry): N_{DOC} - Fish: N_{Fgl}	- Crops: $AgIS_i = QqSivS$ (counting) - Livestock (cattle, sheep, goat, pig): $AgIS_i = NfcRal$ - Livestock (poultry): $AgIS_i = N_{DOC}$ - Fish: $AgIS_i = N_{Fgl}$	National Statistics FAO																				
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5. Indicator Computing	For a given year(t), the Growth rate of the ratio of supplied quality agriculture inputs to the total national inputs requirements for the commodity (in %), is : $tAgI_t = 100 \times (R_t - R_{2015}) / R_{2015}$																							

Theme 3

Ending Hunger

 Performance Category **PC 3.1iv Access to Agriculture inputs and technologies**

 1. Objective of the PC

Promote utilization of cost-effective & quality agricultural inputs, irrigation, mechanization, and agrochemicals for crops, fisheries, livestock and forestry to boost agricultural productivity.

 2. Performance Target

All farmers have access to quality agricultural advisory services that provide locally relevant knowledge, information and other services.

Reference in the Malabo Declaration:

Malabo Decl. 3(a), SDG Target

 3. Performance Indicator

Indicator	Definition / Explanation
Proportion of farmers having access to Agricultural Advisory Services (FAgAS)	<p>Agricultural extension is the function of providing need- and demand-based knowledge in agronomic techniques and skills to rural communities in a systematic, participatory manner.</p> <p>This indicator is the percentage of farmers having access to Agricultural Advisory Services through training, information sharing, and other extension support related services to farmers and small-to-medium enterprises in rural value chains .</p>

 4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Number of farmers ⁽¹⁾ having access to Agricultural Advisory Services, NFAgAS	<p>Farmers having access to Agricultural Advisory Services (AAS) through training, information sharing, and other extension support related services to farmers and small-to-medium enterprises in rural value chains.</p> <p>The AAS can be provided through public extension services, Agribusiness private companies, CSOs, Farmer organizations, Cooperatives. The advisory service can be organized through physical trainings, ICT, Video, Pamphlet, training school farms etc.</p>	Total number and farmers coverage of agricultural extension workers	Sum of all recorded farmers covered by extension workers or having access to AAS by other means	Administrative data, and/or agricultural-based household survey
2. Total Number of farmers, NF	Total number of farmers involved in crop production, livestock, fishery and forestry.	Total number of farmers	Sum of all recorded farmers	Administrative data, and/or agricultural-based household survey

 5. Indicator Computing

For a given year(t), the **proportion of farmers having access to Agricultural Advisory Services** is , $AFAgAS_t = (NFAgAS_t/NF_t) \times 100$

⁽¹⁾ Number of **farmer households** can be used to calculate the ratio, if that is the data rather collected by the country.

Theme 3
Ending Hunger
Performance Category PC 3.1v Access to Agriculture inputs and technologies
1. Objective of the PC

Promote utilization of cost-effective & quality agricultural inputs, irrigation, mechanization, and agrochemicals for crops, fisheries, livestock and forestry to boost agricultural productivity.

2. Performance Target

Increase the level of Investments in Agricultural Research and Development to at least 1% of the Agricultural GDP, from 2015 to 2025.

Reference in the Malabo Declaration:

Malabo Decl. 3(a)

3. Performance Indicator

Indicator	Definition / Explanation
Total Agricultural Research Spending as a share of AgGDP (\uparrow TARS)	Total agricultural R&D spending (excl. private for-profit sector) as a share of AgGDP offer useful insights into relative levels of agricultural R&D investment across countries and over time. It should be noted, however, that they do not take into account the policy and institutional environment within which agricultural research occurs, the broader size and structure of a country's agricultural sector and economy, or qualitative differences in research performance across countries, so they need to be interpreted with care (ASTI). Agricultural R&D spending data is divided by total AgGDP values taken from the World Development Indicators.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Total Agricultural Research Spending, TARS	ASTI's national agricultural research expenditure data is categorized as salary-related expenses, operating and program costs, and capital investments by government, nonprofit, and higher education agencies. Data on spending by private entities are excluded, due to lack of availability. Agricultural R&D spending (excluding the private for-profit sector)	- Salaries $(W) = FTE_{phd} * W_{phd} + FTE_{msc} * W_{msc} + FTE_{bsc} * W_{bsc}$ - Program and Operation Cost (POC) - Capital Investment (CI)	$TARS = W + POC + CI$	ASTI (www.asti.cgiar.org/data/)/ Countries/ NARS/NARIS
2. Agriculture, value added, AgGDP	Refere to profile PC 3.2i		AgGDP	Countries/National Bureau of Statistics/WDI

5. Indicator Computing

For a given year, the Total Agricultural Research Spending as a share of AgGDP, is \uparrow TARS = TARS/AgGDP x 100

Theme 3

Eradicating Poverty through Agriculture

Performance Category **PC 3.1vi Access to Agriculture inputs and technologies**

1. Objective of the PC

Promote utilization of cost-effective & quality agricultural inputs, irrigation, mechanization, and agrochemicals for crops, fisheries, livestock and forestry to boost agricultural productivity.

2. Performance Target

Ensure that 100% of farmers and agribusiness interested in agriculture have rights to access the required land.

Reference in the Malabo Declaration:

Malabo Decl. 4(c), SDG goal

3. Performance Indicator

Indicator	Definition / Explanation
Proportion of farm households with ownership or secure land rights (\ddagger HhSL).	<p>Land is the key resource needed for agricultural production and there is widespread evidence that secure land tenure is necessary for investment in new technologies and sustainable practices. While men face a set of potential causes of tenure insecurity, such as a poorly functioning legal system and potential takeovers from powerful elites or the government, women face an additional layer of tenure insecurity if their rights are not recognized by the family, community, or law. The ideal measure would be secure land tenure as reported by men and women themselves.</p> <p>The social and legal context regarding land ownership varies across countries. The definition of ownership will be defined appropriately for each context. For example, when the state officially owns all of the land, ownership could be defined as those with land use certificates. This indicator includes those who own land individually and those who own it jointly as landowners, although the rights associated with individual and joint ownership may differ, and may differ across contexts.</p> <p>This indicator, the share of rural adult women [men] who own land, is preferable to another widely used indicator, the percentage of landowners who are women [men]. The former uses all women [men] as the denominator, while the latter uses the number of landowners. The disadvantage of the latter measure is that we lose information on how many or few people own land.</p>

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Total number of farm households in the country, N_7 FHh	Rural farm households are those engaged in any form of agriculture (livestock, crops, fisheries)	Demographic data, agricultural census. Best to disaggregate this indicator to show ownership by gender (male, female, joint), as the gender dimension of land ownership is a critical inclusivity indicator.		LSMS-ISA or FAO Gender & Land Rights Database
2. Number of farm HHs with secured land rights, NF HhSL	<p>Number of households where at least one member is able to demonstrate through documentation ownership rights of property.</p> <p>Land ownership is defined according to local context, and the definition of ownership varies across countries. Only some surveys reflect joint ownership.</p>	Household survey data	<p>Duplicates, urban households, men/women less than 18 years old and missing data excluded.</p> <p>Results are unweighted</p>	LSMS-ISA or FAO Gender & Land Rights Database

5. Indicator

For a given year (t), the **proportion of farm households with ownership or secure land rights, \ddagger HhSL** is :
 \ddagger HhSL_t = 100 x NFHhSL_t / N_7 FHh_t

Theme 3

Ending Hunger

 Performance Category **PC 3.2i Agricultural Productivity**

 1. Objective of the PC

Increase agricultural productivity.

 2. Performance Target
Double (100% increase) the current agricultural labor productivity levels by the year 2025 from the year 2015.
Reference in the Malabo Declaration:

Malabo Decl. 3(a)

 3. Performance Indicator

Indicator	Definition / Explanation
Growth rate of agriculture value added, in constant US dollars, per agricultural worker (\dagger AgW).	Agriculture value added per worker is a measure of agricultural productivity. Value added in agriculture measures the output of the agricultural sector (International Standard Industrial Classification of All Economic Activities, Rev.4 or ISIC divisions 1-5) less the value of intermediate inputs. Agriculture comprises value added from forestry, hunting, and fishing as well as cultivation of crops and livestock production (WDI, World Bank, 2016).

 4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Agriculture value added in constant US dollars (AgGDP)	Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3 (WDI, World Bank, 2016).	Total agricultural value added in constant US dollars (AgGDP)		National Statistics WDI FAO
2. Agricultural worker (W)	The term "agricultural workers" is used in preference to "farmworkers" as it better reflects the broad nature of plantations, horticulture, primary agricultural processing and fish-farming, and recognizes that waged agricultural workers form part of the larger rural workforce (FAO, ILO, and IUF, 2007)	Total number of agricultural workers (W)		National Statistics WDI FAO
3. Agricultural value added per agricultural worker (constant 2010 USD), AgW	Total agriculture value added, divided by total number of agricultural workers for years 2011-2015.		$AgW = AgGDP / W$	
4. Baseline value of the AgW (AgW ₂₀₁₅)	The baseline value is an average of five-year value, from 2011 to 2015.		AgW ₂₀₁₅	

 5. Indicator Computing

 For a given year(t), the **Growth rate of Agriculture value added per agricultural worker** (in %), is :

$$\dagger AgW_t = 100 \times (AgW_t - AgW_{2015}) / AgW_{2015}$$

Theme 3		Ending Hunger		
Performance Category		PC 3.2ii Agricultural Productivity		
1. Objective of the PC	Increase agricultural productivity.			
2. Performance Target	Double (increase by 100%) the current agricultural land productivity levels, by the year 2025 from the year 2015.			
	<i>Reference in the Malabo Declaration:</i>		<i>Malabo Decl. 3(a)</i>	
3. Performance Indicator	Indicator	Definition / Explanation		
	Growth rate of agriculture value added, in constant US dollar, per hectare of agricultural arable land ($tAgL$).	Agriculture value added per hectare of land is a measure of agricultural productivity. Agriculture comprises value added from forestry, hunting, and fishing as well as cultivation of crops and livestock production (WDI, World Bank, 2016).		
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods
	1. Agriculture added value in constant US dollars (AgGDP)	Refere to profile PC 3.2i In this specific case, consider $AgGDP$ minus the contribution for the fisheries (Total AgGDP - fisheries GDP)	Revised total agricultural value added, at constant 2010 U.S. dollars (AgGDP revised).	
	2. Agricultural arable land (L)	Arable land (hectares) includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.	Total agricultural arable land in hectare (L)	
	3. Agriculture value added per hectare of agricultural arable land (AgL)	Agriculture value added divided by total agricultural arable land in hectare.		$AgL = AgGDP / L$
	4. Baseline value of the agriculture value added per hectare of agricultural arable land (AgL_{2015})	The baseline value is an average of five-year value, from 2011 to 2015.		AgL_{2015}
5. Indicator Computing	For a given year(t), the Growth rate of agriculture value added, at constant US dollars, per hectare of agricultural arable land (in %), is : $tAgL_t = 100 \times (AgL_t - AgL_{2015}) / AgL_{2015}$			

Theme 3

Ending Hunger

 Performance Category **PC 3.2iii Agricultural Productivity**

 1. Objective of the PC

Increase agricultural productivity.

 2. Performance Target
Double (100% increase) the current agricultural yield levels, by the year 2025 from the year 2015.
Reference in the Malabo Declaration:

Malabo Decl. 3(a)

 3. Performance Indicator

Indicator	Definition / Explanation
Growth rate of yields for the 5 national priority commodities, and possibly for the 11 AU agriculture priority commodities(*) ($\ddagger Y$).	Production per unit of area for products. In most of the cases yield data are not recorded but obtained by dividing the production data by the data on area harvested (FAO).

 4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Total production for individual commodity (P_d)	<p>Production data refer to the actual harvested production from the field or orchard and gardens, excluding harvesting and threshing losses and that part of crop not harvested for any reason.</p> <p>Production therefore includes the quantities of the commodity (<i>crop, livestock products, fish, etc...</i>) sold in the market (marketed production) and the quantities consumed or used by the producers (auto-consumption) (FAO).</p>	Production for individual commodity, in ton (t)		National Statistics FAO
2. Total size of the production unit for individual commodities (L_i)	Production unit can be expressed in term of surface of land on which a crop is grown, cattle for livestock, etc...	Size of the production unit for individual commodities (hectare for crops, cattle for livestock, etc...)		National Statistics FAO
3. Yield (Y_i)	Total production divided by total area for products.		$Y_i = P_d / L_i$	FAOstat or national data
4. Baseline value (Y_{2015}) of the yield	The baseline value (Y_{2015}) is an average of three to five-year value, from 2011 to 2015.		Y_{2015}	

 5. Indicator Computing

For a given year(t), the **Growth rate of yields for individual priority commodity** (in %), is :
 $\ddagger YI_{it} = 100 \times (Y_t - Y_{2015}) / Y_{2015}$; and the indicator (overall growth rate) is: $\ddagger YI = \text{average}(\ddagger YI_{it})$

(*) The 11 AU priority commodities are:

-Rice, -Maize, -Legumes, -Cotton, -Oil palm, -Beef, -Dairy, -Poultry and fisheries, -Cassava, -Sorghum and -Millet.

Theme 3		Ending Hunger			
Performance Category		PC 3.3 Post-Harvest Loss			
1. Objective of the PC	Provide logistics support to all stages of the food production chain (<i>field/harvest, storage, processing, transportation, final retail market</i>) to limit degradation both in quantity and in quality of the produced food.				
2. Performance Target	Halve (decrease by 50%) the current levels of Post-Harvest Losses (PHL), by the year 2025 from the year 2015.				
	<i>Reference in the Malabo Declaration:</i>		<i>Malabo Decl. 3(b)</i>		
3. Performance Indicator	Indicator	Definition / Explanation			
	Reduction rate of Post-Harvest Losses for (at least) the 5 national priority commodities, and possibly for the 11 AU agriculture priority commodities ^(*) (\downarrow PHL).	Percentage of total production that is lost (quantitative and qualitative) occurring during all the phases of the post-harvest system for priority products. For the purpose of this report, post-harvest losses (PHL) is restricted to the losses that occur during harvesting, storage, transport, processing, packaging and sales.			
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
	1. Production in million of tons ($Pd_{i,t}$)	Production is the total actual harvest excluding any losses, and the part of the product not harvested for any reason. It includes quantities of the commodity sold in the market and quantities consumed or used by the producers.	Weight of crop and animal production		National source or FAO or APHLIS
	2. Loss in million of tons ($LS_{i,t}$)	Food losses refers to any loss by deterioration or waste. The term "loss" includes both food loss and food waste. Depending on the availability of data, wastage or PHL at the strict sense will be used and comparison from one year to the other will be made in a consistent manner.	Weight of damaged or lost product/commodity at each stage of the following stages of post-harvest system that includes: - Loss at Harvesting; L_{hv} - Loss at Storage; L_{st} - Loss at Transport; L_{tr} - Loss at Processing ^(*) ; L_{pr} - Loss at Packaging; L_{pc} - Loss at Sales; L_{sl}	The total loss of the commodity i is: $LS_j = L_{hv} + L_{st} + L_{tr} + L_{pr} + L_{pc} + L_{sl}$	National source or FAO or APHLIS
	3. Post Harvest Loss for the commodity i in a given year t , ($PHL_{i,t}$)	Post-harvest loss the commodity i , during the year t		$PHL_{i,t} = (LS_{i,t} / Pd_{i,t}) \times 100$	FAOstat or national data
	4. Baseline value of the PHL to be considered for the year 2015, ($PHL_{i,av}$)	The value of the Post-harvest loss for the commodity i , t to be considered for the baseline year 2015.		$PHL_{i,av} = \text{average } (PHL_{i,t})_{t=2011 \text{ to } 2015}$	FAOstat or national data
	5. The Reduction rate of Post-Harvest Losses of the commodity i at the year t is:	Toward achieving the commitment on the PHL, the reduction rate of the PHL for the commodity i , at a year $t > 2015$		$\downarrow PHL_{i,t} = 100 \times (PHL_{i,av} - PHL_{i,t}) / PHL_{i,av}$	
5. Indicator Computing	For a given year (t), the Average reduction rate of Post-Harvest Losses for (at least) the 5 national priority commodities, and possibly for the 11 AU agriculture priority commodities (%) , is : \downarrow PHL _t = average (\downarrow PHL _{i,t})				

^(*) The 11 AU priority commodities are:

-Rice, -Maize, -Legumes, -Cotton, -Oil palm, -Beef, -Dairy, -Poultry and fisheries, -Cassava, -Sorghum and -Millet.

^(*) Ensure consistency in estimating the loss while using appropriate correction. For processed products, the losses should be divided by the processing coefficient.

Theme 3

Ending Hunger

 Performance Category **PC 3.4 Social Protection**

1. Objective of the PC Integrate measures for increased agricultural productivity with social protection initiatives focusing on vulnerable social groups through committing targeted budget lines within our national budgets for social protection.

2. Performance Target **Commit within national budgets, budget lines that amount to 100% of the total resource requirements for coverage of the vulnerable social groups, from 2015 to 2025, for use to support social protection initiatives, and to address any eventual disasters and emergencies with food and nutrition security implications.**

Reference in the Malabo Declaration:

Malabo Decl. 3(c)

3. Performance Indicator

Indicator	Definition / Explanation
Budget lines (%) on social protection as percentage of the total resource requirements for coverage of the vulnerable social groups (SP).	The Budget lines on social protection (SP) for farm households or communities is defined here as the amount of money that the country allocates for preventive, protective, promotive or transformative assistance to farm individuals, households or communities. This may be in the form of cash transfers (CT) ; emergency food supplies (EFS) ; school feeding (SF) programmes ; or other protective services (input supplies water services, livestock protection programme, national pension scheme, orphan and vulnerable children programme, etc.) that protect vulnerable farming households against livelihood risks on an ongoing basis or in times of emergency/disasters. All components included in the calculation should be spend on farm individuals, households, or communities as opposed to urban communities not engaged in agricultural activities. The total resource requirements for coverage of the vulnerable social groups could be derived from the vulnerability assessment of the country.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Budget Allocation to social protection Cash Transfers for food and cash reserves (BA_{CT})	Budget allocation to social protection in form of cash transfers (CT) for food and cash reserves, to farm individuals, households or communities that helps to protect against livelihood risks.	BA_{CT}		National government budget records National Bureau of Statistics
2. Budget Allocation to social protection Emergency Food Supplies (BA_{EFS})	Budget allocation to social protection in form of emergency food supplies (EFS) to farm individuals, households or communities. This include hunger safety, famine, or any other disaster or emergency. Costs of strenghtening early warning systems for advanced and proactive responses are included in this category.	BA_{EFS}		National government budget records National Bureau of Statistics
3. Budget Allocation to social protection School Feeding (BA_{SF})	Budget allocation to social protection in form of school feeding (SF) to farming communities.	BA_{SF}		National government budget records National Bureau of Statistics
4. Budget Allocation to social protection Other protective services (BA_{Other})	Budget allocation to social protection (not covered above) promotive or transformative of agriculture eg. input support and other services like water orr livestock protection e.g. vaccinations etc. including national pension scheme, orphan and vulnerable children programme, etc.)	BA_{Other}		National government budget records National Bureau of Statistics
5. Total Budget Allocation to social protection (TBA_{SP})	Sum of all the above budget allocations on social protection.		TBA_{SP} = BA_{CT} + BA_{EFS} + BA_{SF} + BA_{Other}	National government budget records National Bureau of Statistics
6. Total Budget Requirements for social protection (TBR_{SP})	Total resource requirements for coverage of the vulnerable social groups that is derived from the vulnerability assessment of the country. This is with the assumption that every country conveys or has access to study on vulnerability assessment.		TBR_{SP}	National government budget records National Bureau of Statistics

5. Indicator Computing

For a given year(t), the **Budget lines on social protection as percentage of the total resource requirements for coverage of the vulnerable social groups** (in %), is : $\%SP_t = 100 \times TBA_{SPt} / TBR_{SPt}$

Theme 3

Ending Hunger

 Performance Category **PC 3.5i Food security and Nutrition**

1. Objective of the PC Promote initiatives to improve nutritional status, and in particular, the elimination of hunger and child under nutrition in Africa, by bringing down child stunting, child underweight, child wasting, and child undernourishment; and improving dietary diversity for women and children.

2. Performance Target **Bring down child stunting to 10%, by the year 2025.**

Reference in the Malabo Declaration: Malabo Decl. 3(d)

3. Performance Indicator

Indicator	Definition / Explanation
Prevalence of stunting (% of children under 5 years old) (St).	Stunting is a height-for-age measurement that is a reflection of chronic undernutrition. This indicator measures the percent of children 0-59 months who are stunted, as defined by a height for age Z score < -2. Although different levels of severity of stunting can be measured, this indicator measures the prevalence of all stunting, i.e. both moderate and severe stunting combined. While stunting is difficult to measure in children 0-6 months and most stunting occurs in the -9-23 month range (1,000 days), this indicator reports on all children under 59 months to capture the impact of interventions over time and to align with DHS data.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Percent of children 0-59 month of age in the sample that is stunted (St)	Percent of children 0-59 months of age in the sample with a height for age Z-score of <-2 SD.	Total number of children 0-59 months of age in the sample (T) Number of children 0-59 months of age in the sample that are stunted (S)	$St = S/T*100$ The numerator for this indicator is the total number of children 0-59 months in the sample with a height for age Z score < -2. The denominator is the total number of children 0-59 months in the sample with height for age Z score data.	WHO, DHS surveys, UNICEF MICS
2. Percent of male children 0-59 month of age in the sample that is stunted (Hm)	Percent of male children 0-59 months of age in the sample with a height for age Z-score of <-2 SD	Total number of male children 0-59 months of age in the sample (Tm) Number of male children 0-59 months of age in the sample that are stunted (Sm)	$Stm = Sm/Tm*100$	WHO, DHS surveys, UNICEF MICS
3. Percent of female children 0-59 month of age in the sample that is stunted (Hw)	Percent of female children 0-59 months of age in the sample with a height for age Z-score of <-2 SD	Total number of female children 0-59 months of age in the sample (Tf) Number of female children 0-59 months of age in the sample that are stunted (Sf)	$Stf = Sf/Tf*100$	WHO, DHS surveys, UNICEF MICS

5. Indicator Computing

For a given year(t), the **Prevalence of stunting (% of children under 5 years old)** (in %), is : $St_t = St$

Theme 3

Ending Hunger

 Performance Category **PC 3.5ii Food security and Nutrition**

 1. Objective of the PC

Promote initiatives to improve nutritional status, and in particular, the elimination of hunger and child under nutrition in Africa, by bringing down child stunting, child underweight, child wasting, and child undernourishment; and improving dietary diversity for women and children.

 2. Performance Target

Bring down underweight to 5% or less, by the year 2025.

Reference in the Malabo Declaration:

Malabo Decl. 3(d)

 3. Performance Indicator

Indicator	Definition / Explanation
Prevalence of underweight (% of children under 5 years old) (U_w).	Underweight is a weight-for-age measurement. Underweight is a reflection of acute and/or chronic undernutrition. This indicator measures the percent of children 0-59 months who are underweight, as defined by a weight for age Z score < -2. Although different levels of severity of underweight can be measured, this indicator measures the prevalence of all underweight, i.e. both moderate and severe underweight combined.

 4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Percent of children 0-59 months of age in the sample that is underweight (U _w)	Percent of children 0-59 months of age in the sample with a weight for age Z-score of <-2 SD.	Total number of children 0-59 months of age in the sample (T) Number of children 0-59 months of age in the sample that are underweight (U)	$U_w = U/T * 100$ The numerator for this indicator is the total number of children 0-59 months in the sample with a weight for age Z score < -2. The denominator is the total number of children 0-59 months in the sample with weight for age Z score data.	WHO, DHS surveys, UNICEF MICS
2. Percent of male children 0-59 month of age in the sample that is underweight (U _{wm})	Percent of male children 0-59 months of age in the sample with a weight for age Z-score of <-2 SD	Total number of male children 0-59 months of age in the sample (T _m) Number of male children 0-59 months of age in the sample that is underweight (U _m)	$U_{wm} = U_m/T_m * 100$	WHO, DHS surveys, UNICEF MICS
3. Percent of female children 0-59 month of age in the sample that is underweight (U _{wf})	Percent of female children 0-59 months of age in the sample with a weight for age Z-score of <-2 SD	Total number of female children 0-59 months of age in the sample (T _f) Number of female children 0-59 months of age in the sample that is underweight (U _f)	$U_{wf} = U_f/T_f * 100$	WHO, DHS surveys, UNICEF MICS

 5. Indicator Computing

For a given year(t), the **Prevalence of underweight (% of children under 5 years old)** (in %), is : **$U_{w_t} = U_w$**

Theme 3

Ending Hunger

 Performance Category **PC 3.5iii Food security and Nutrition**

 1. Objective of the PC

Promote initiatives to improve nutritional status, and in particular, the elimination of hunger and child under nutrition in Africa, by bringing down child stunting, child underweight, child wasting, and child undernourishment; and improving dietary diversity for women and children.

 2. Performance Target

Bring down wasting to 5% or less, by the year 2025.

Reference in the Malabo Declaration:

Malabo Decl. 3(d) & the Africa Regional Nutrition Strategy (ARNS)

 3. Performance Indicator

Indicator	Definition / Explanation
Prevalence of wasting (% of children under 5 old) (W).	This indicator measures the percent of children 0-59 months with acute malnutrition, as defined by a weight for height Z score < -2. Although different levels of severity of wasting can be measured, this indicator measures the prevalence of all wasting, i.e. both moderate and severe wasting combined.

 4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Percent of children 0-59 months of age in the sample that are wasted	Percent of children 0-59 months of age in the sample with a weight for height Z-score of <-2 SD	Total number of children 0-59 months of age in the sample (T) Number of children 0-59 months of age in the sample that are wasted (W)	$Wa = W/T*100$ The numerator for the indicator is the total number of children 0-59 months in the sample with a weight for height Z score < -2. The denominator is the total number of children 0-59 months in the sample with weight for height Z score data.	WHO, DHS Surveys, UNICEF MICS
2. Percent of male children 0-59 month of age in the sample that are wasted	Percent of male children 0-59 months of age in the sample with a weight for height Z-score of <-2 SD	Total number of male children 0-59 months of age in the sample (Tm) Number of male children 0-59 months of age in the sample that are wasted (Wm)	$Wam = Wm/Tm*100$	WHO, DHS Surveys, UNICEF MICS
3. Percent of female children 0-59 month of age in the sample that are wasted	Percent of female children 0-59 months of age in the sample with a weight for height Z-score of <-2 SD	Total number of male children 0-59 months of age in the sample (Tf) Number of male children 0-59 months of age in the sample that are wasted (Wf)	$Waf = Wf/Tf*100$	WHO, DHS Surveys, UNICEF MICS

 5. Indicator Computing

For a given year(t), the **Prevalence of wasting (% of children under 5 old)** (in %), is : $W_t = W$

Theme 3		Ending Hunger		
Performance Category		PC 3.5iv Food security and Nutrition		
1. <u>Objective of the PC</u>	Promote initiatives to improve nutritional status, and in particular, the elimination of hunger and child under nutrition in Africa, by bringing down child stunting, child underweight, child wasting, and child undernourishment; and improving dietary diversity for women and children.			
2. <u>Performance Target</u>	Bring down undernourishment to 5% or less, by the year 2025.			
	<i>Reference in the Malabo Declaration:</i> Malabo Decl. 3(d) & the Africa Regional Nutrition Strategy (ARNS)			
3. <u>Performance Indicator</u>	Indicator	Definition / Explanation		
	Proportion of the population that is undernourished (<i>% of the country's population</i>) (U).	The proportion of the population in the Country with a level of Dietary Energy Consumption (DEC) lower than the Dietary Energy Requirements (DER). This indicator is used to monitor evolution of hunger over time (at the World, Regional and, since 1999, National level, through publication of the State of Food Insecurity).		
4. <u>Disaggregation</u>	Parameter/ Unit	Definition	Data required	Computing Methods
	Percent of the country's population	<p>The PoU indicator is defined as the probability that a randomly selected individual from the reference population is found to consume less than his/her calorie requirement for an active and healthy life. It is written as:</p> $PoU = \int_{x < MDER} f(x) dx$ <p>where f(x) is the probability density function of per capita calorie consumption. The parameters needed for the calculation of the indicator are: the mean level of dietary energy consumption (DEC); a cut-off point defined as the Minimum Dietary Energy Requirement (MDER); the coefficient of variation (CV) as a parameter accounting for inequality in food consumption; and a skewness (SK) parameter accounting for asymmetry in the distribution. The DEC as well as the MDER are updated annually, with the former calculated from the FAO Food Balance Sheets. The MDER is calculated as a weighted average of energy requirements according to sex and age class, and is updated each year from UN population ratio data. The inequality in food consumption parameters are derived from National Household Survey data when such data is available and reliable. Due to the limited number of available household surveys, the inequality in food access parameters are updated much less frequently over time than the DEC and MDER parameters. Source: Refinements to the FAO Methodology for estimating the Prevalence of Undernourishment Indicator ESS Working Paper No. 14-05, September 2014 http://www.fao.org/3/a-i4046e.pdf</p>		FAO / National Statistics
5. <u>Indicator Computing</u>	For a given year (t), the <i>proportion of the population that is undernourished</i> , is : U			

Theme 3		Ending Hunger		
Performance Category		PC 3.5v Food security and Nutrition		
1. Objective of the PC	Promote initiatives to improve nutritional status, and in particular, the elimination of hunger and child under nutrition in Africa, by bringing down child stunting, child underweight, child wasting, and child undernourishment; and improving dietary diversity for women and children.			
2. Performance Target	Increase the proportion of women at reproductive age that attain the minimum dietary diversity by 50%, by the year 2025.			
	<i>Reference in the Malabo Declaration:</i>		Malabo Decl. 3(d) & the Africa Regional Nutrition Strategy (ARNS)	
3. Performance Indicator	Indicator	Definition / Explanation		
	Growth rate of the proportion of Minimum Dietary Diversity-Women (\dot{MDDW})	Percent of women in the sample reaching the MDD-W. The indicator reflects the proportion attaining a minimum dietary diversity which is an indication of diet quality including micronutrient adequacy. It serves as a process indicator to reflect if programmes in place are influencing dietary patterns towards better nutrition status and thus of direct relevance to the CAADP process. Women of reproductive age are part of the first 1000 days of focus for ending child undernutrition.		
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods
	1. Proportion of minimum Dietary Diversity-Women (MDDW)	Is the proportion of women who receive foods from 5 or more in the food group of 10, described as below: <u>MDD-W food groups</u> 1. All starchy staple foods 2. Pulses (Beans and lentils) 3. Nuts and seeds 4. Dairy 5. Flesh foods (meat, poultry, fish) 6. Eggs 7. Dark green leafy vegetables 8. Other vitamin A-rich vegetables and fruits 9. Other vegetables 10. Other fruits MDD-Women are the ones who reflect consumption of at least five of ten foods group.	- Total number of women at reproductive age: W_T , as the denominator. - Number of women at reproductive age (15-49 yrs) that attain the minimum dietary diversity: W_{MDDW} , as the numerator.	$MDDW = W_{MDDW}/W_T$ Specific Sampling methods is used to determine the proportion of the total sample (W_T) reaching MDD-W (W_{MDD-W}) expressed as a % of sample population. <i>Consumption of at least approximately 15 g is recommended a food group to "count", i.e., thus foods used only as a condiments are not counted.</i> <i>Consumption of foods from at least 5 food groups has been validated to be representative of a more nutrient adequate diet.</i>
5. Indicator Computing	For a given year(t), the Growth rate of the proportion of Minimum Dietary Diversity-Women (\dot{MDDW}) (in %), is : $\dot{MDDW}_t = 100 \times (MDDW_t - MDDW_{2015}) / MDDW_{2015}$			

Theme 3

Ending Hunger

 Performance Category **PC 3.5vi Food security and Nutrition**

 1. **Objective of the PC**

Promote initiatives to improve nutritional status, and in particular, the elimination of hunger and child under nutrition in Africa, by bringing down child stunting, child underweight, child wasting, and child undernourishment; and improving dietary diversity for women and children.

 2. **Performance Target**

Reach at least 50% of children 6-23 months that have the minimum acceptable diet by the year 2025.

Reference in the Malabo Declaration:

Malabo Decl. 3(d). The Africa Regional Nutrition Strategy (ARNS)

 3. **Performance Indicator**

Indicator	Definition / Explanation
Proportion of 6-23 months old children who meet the Minimum Acceptable Diet (MAD)	Percent in the age group 6-23 months reaching the minimum acceptable diet. This age group is critical to reducing stunting and the indicator will serve as a process indicator of improvements in diet quality and feeding practices towards better nutrition. Because its computation includes dietary diversity in the age group it will be possible to use it as a process indicator on linking agriculture programmes to observed changes in nutrition status indicators. This is important because agriculture is the main strategy targeted by the Malabo declaration to impact nutrition.

 4. **Disaggregation**

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
Minimum Acceptable Diet for 6-23 months old infants	Composite indicator	Minimum dietary diversity for children: Proportion of children 6–23 months of age who receive foods from 4 or more food groups: The 7 foods groups used for tabulation of this indicator are: grains, roots and tubers; legumes and nuts; dairy products (milk, yogurt, cheese); flesh foods (meat, fish, poultry and liver/organ meats); <u>eggs Part 1</u> : Definitions 7; vitamin-A rich fruits and vegetables; other fruits and vegetables Minimum meal frequency: Proportion of breastfed and non-breastfed children 6–23 months of age who receive solid, semi-solid, or soft foods (but also including milk feeds for non-breastfed children) the minimum number of times or more. Minimum is defined as: 2 times for breastfed infants 6–8 months; 3 times for breastfed children 9–23 months; 4 times for non-breastfed children 6–23 months	Calculated differents for the following two fractions of the children (Proportion of breastfed children 6–23 months of age who had at least the minimum dietary diversity and the minimum meal frequency during the previous day)/(Breastfed children 6–23 months of age) and (Proportion of non-breastfed children 6–23 months of age who received at least 2 milk feedings and had at least the minimum dietary diversity, and the minimum meal frequency during the previous day)/(Non-breastfed children 6–23 months of age)	DHS, UNICEF MICS, WHO The sample universe for this indicator is last born children 6–23 months of age living with their mothers.
1. Breastfed children 6–23 months of age who had at least the minimum dietary diversity and the minimum meal frequency during the previous day	Proportion Breastfed children 6–23 months of age in the sample who had at least the minimum dietary diversity and the minimum meal frequency during the previous day	- Total breastfed children in sample reaching both minimum diet diversity and minimum meal frequency ($BF_{MDD\&MMF}$); - Total breastfed children in sample (TBF)	The proportion ($BF_{MDD\&MMF}/TBF$)*100 is estimated for the breastfed children.	DHS, UNICEF MICS, WHO The sample universe for this indicator is last born children 6–23 months of age living with their mothers.
2. Non-breastfed children 6–23 months of age who had at least 2 milk feeds and the minimum dietary diversity not including the milk feeds and the minimum meal frequency during the previous day	Proportion of non-breastfed children 6–23 months of age in the sample who had at least 2 milk feeds and at least the minimum dietary diversity excluding the milk feeds and the minimum meal frequency during the previous day	- Total non-breastfed children in sample getting at least 2 milk feeds and reaching both minimum diet diversity and minimum meal frequency ($NBF_{2MF\&MDD\&MMF}$); - Total non-breastfed children in sample (TNBF)	The proportion ($NBF_{2MF\&MDD\&MMF}/TNBF$)*100 is estimated for the breastfed children.	

 5. **Indicator Computing**

For a given year(i), the **Proportion of 6-23 months old children who meet the Minimum Acceptable Diet** (in %), is :

$$MAD = 100 \times (BF_{MDD\&MMF} + NBF_{2MF\&MDD\&MMF}) / (TBF + TNBF)$$

Performance theme 4:
Eradicating Poverty through
Agriculture

Theme 4
Eradicating Poverty through Agriculture
Performance Category **PC 4.1i Agricultural GDP and Poverty Reduction**
1. Objective of the PC

Sustain annual agriculture sector growth by ensuring higher contribution to GDP and to poverty reduction.

2. Performance Target
Sustain annual agricultural GDP growth of at least 6%, from the year 2015 to the year 2025.
Reference in the Malabo Declaration:
Malabo Decl. 4(a)
3. Performance Indicator

Indicator	Definition / Explanation
Growth rate of the agriculture value added, in constant US dollars (tAgGDP).	Percentage change of agriculture value added within a specific time period. Agriculture corresponds to the divisions 1-5 of the International Standard Industrial Classification (ISIC, revision 3) and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production (WDI, World Bank, 2016).

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Agriculture value added, in constant US dollars (AgGDP)	Total agriculture value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3.	Agriculture value added, in constant US dollars (AgGDP)		National Statistics WDI
2. Baseline value (AgGDP₂₀₁₅) of the Agriculture value added, in constant US dollars	The baseline value (AgGDP₂₀₁₅) is an average the five-year value of the Agriculture value added, from 2011 to 2015.		AgGDP₂₀₁₅	
3. Annual growth rate of Agriculture value added, in constant US dollars (tAgGDP)	Annual growth rate measures the percentage change of the agriculture value added between two consecutive years, (t) and (t-1), i >= 2016		$tAgGDP_t = 100 \times (AgGDP_t - AgGDP_{t-1}) / AgGDP_{t-1}$	
4. Average annual Growth rate of Agriculture value added, in constant US dollars (aAgGDP)	For a given year (i), the average growth rate is calculated over the entire performance years n ; n includes i , and excludes the base year 2015 .		$aAgGDP_i = Average(tAgGDP_i)_n$	

5. Indicator Computing

 For a given year(**t**), the **Growth rate of the agriculture value added, in constant US dollars** (in %), is : **aAgGDP_t**

Theme 4

Eradicating Poverty through Agriculture

Performance Category **PC 4.1ii Agricultural GDP and Poverty Reduction**

1. Objective of the PC

Sustain annual agriculture sector growth by ensuring higher contribution to GDP and to poverty reduction.

2. Performance Target

Ensure that agriculture growth contribute to at least 50% to the overall poverty reduction target, from the year 2015 to the year 2025.

Reference in the Malabo Declaration: Malabo Decl. 4(a)

3. Performance Indicator

Indicator	Definition / Explanation
Stand-by for more research	

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source

5. Indicator Computing

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Theme 4
Eradicating Poverty through Agriculture
Performance Category **PC 4.1iii Agricultural GDP and Poverty Reduction**
1. Objective of the PC

Sustain annual agriculture sector growth by ensuring higher contribution to GDP and to poverty reduction.

2. Performance Target

Reduce poverty level by at least 50%, at national poverty line, from the year 2015 to the year 2025.

Reference in the Malabo Declaration:

Malabo Decl. 4(a)

3. Performance Indicator

Indicator	Definition / Explanation
Reduction rate of poverty headcount ratio, at national poverty line (% of population), dpovN	National poverty rate is the percentage of the population living below the national poverty line. National estimates are based on population-weighted sub-group estimates from household surveys (WDI, 2016).

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Poverty headcount ratio (phrN), at national poverty lines (% of population)	National poverty headcount ratio is the percentage of the population living below the national poverty lines. National estimates are based on population-weighted subgroup estimates from household surveys.	Poverty headcount ratio (phrN), at national poverty lines (% of population). The baseline value uses the most recent estimate over the period 2011-2015 .		National statistics WDI

5. Indicator Computing

For a given year(t), the **Reduction rate of poverty headcount ratio, at national poverty line** is:

$$dpovN = 100 \times (phrN_{2015} - phrN_t) / phrN_{2015}$$

Theme 4

Eradicating Poverty through Agriculture

Performance Category **PC 4.1iv Agricultural GDP and Poverty Reduction**

1. Objective of the PC

Sustain annual agriculture sector growth by ensuring higher contribution to GDP and to poverty reduction.

2. Performance Target

Reduce poverty level by at least 50%, at international poverty line, from the year 2015 to the year 2025.

Reference in the Malabo Declaration:

Malabo Decl. 4(a)

3. Performance Indicator

Indicator	Definition / Explanation
Reduction rate of the poverty headcount ratio at international poverty line (% of population), dpovl	International poverty rate is the percentage of the population living below the international poverty line at \$1.90 a day (2011 PPP).

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Poverty headcount ratio (phrl), at international poverty lines (% of population).	International poverty headcount ratio is the percentage of the population living below the international poverty lines at \$1.90 a day (2011 PPP)	Poverty headcount ratio (phr), at international poverty lines (% of population). The baseline value uses the most recent estimate over the period 2011-2015.		National statistics WDI

5. Indicator Computing

For a given year(t), **the Reduction rate of poverty headcount ratio, at international poverty line** , is

$$dpovl = 100 \times (phrl_{2015} - phrl_t) / phrl_{2015}$$

Theme 4		Eradicating Poverty through Agriculture		
Performance Category		PC 4.1v Agricultural GDP and Poverty Reduction		
1. Objective of the PC	Sustain annual agriculture sector growth by ensuring higher contribution to GDP and to poverty reduction.			
2. Performance Target	Contribute to poverty reduction by reducing the gap between the wholesale price and farmgate price, by 50% by the year 2025, from the year 2015.			
	Reference in the Malabo Declaration:		Malabo Decl. 4(a)	
3. Performance Indicator	Indicator	Definition / Explanation		
	Reduction rate of the gap between the wholesale price and farmgate ⁽¹⁾ price (tfgws)	<p>This indicator address the concern with the prices that retailers pay to wholesalers. High market margin can result from high transaction costs, including transportation, existence of monopoly or cartel, information asymmetry, etc.</p> <p>The objective is to reduce the transaction costs so that smallholder famers can benefit from low market margin. Low market margin implies profitability of agricultural enterprises for smallholder farmers. Hence, the rationale and the need for narrowing the gap between farmgate price and wholesale price.</p>		
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods
	1. Average weighted farm gate price , FgP	Prices paid to producers by brokers, aggregators, wholesalers and other market agents.	Mean monthly farm gate prices for previous 12 months for each of the five economically important commodities.	A weighted mean is computed from the monthly means of the five commodities.
	2. Average weighted Wholesale/Market Price, WsP	Intermediary prices paid during transactions among brokers, aggregators and wholesalers. We are concerned with the prices that retailers pay to wholesalers.	Mean monthly wholesale prices for previous 12 months for each of the five economically important commodities. Note: For both average weighted farm gate prices and average weighted wholesale prices a number of disbursed markets should be tracked.	A weighted mean is computed from the monthly means of the five commodities.
	3. Gap between the wholesale price and farmgate price, Gfgws	This expresses in percentage to the wholesale price, the difference between the wholesale price and farmgate price.	- FgP - WsP	Gfgws = 100 x (FgP - WsP)/WsP
5. Indicator	For a given year(t), the Reduction rate of the gap between the wholesale price and farmgate price (in %) , is :			
	$tfgws_t = 100 \times (Gfgws_t - Gfgws_{2015}) / Gfgws_{2015}$			

(1) In case the farmgate price is difficult to collect, the producer price or price in producing areas can be used as a proxi.

Theme 4 *Eradicating Poverty through Agriculture*

Performance Category **PC 4.2 Inclusive PPPs for commodity value chains**

1. Objective of the PC Promote approaches via PPP arrangements to link smallholder farmers to value chains of priority agricultural commodities.

2. Performance Target **Establish and/or strengthen inclusive public-private partnerships (PPP) for at least five (5) priority agricultural commodity value chains with strong linkage to smallholder agriculture, by 2025.**

Reference in the Malabo Declaration: Malabo Decl. 4(b)

3. Performance Indicator

Indicator	Definition / Explanation
Number of priority agricultural commodity value chains for which a PPP is established with strong linkage to smallholder agriculture, (Nc)	A priority agricultural commodity value chain for which a PPP is established with strong linkage to smallholder agriculture, is the priority value chain for which <u>the extent to which</u> smallholder farmers actively participate in its markets, <u>is very high</u> . This extent can be observed through measures such as the high number of smallholders supplying produce through target groups to target buyers, or through the volume of trade (in term of value) between smallholders and target buyers. It is actually the level of integration of smallholders in a priority value chain that can easily will be measured through the volume of trade involving smallholders in the market of the value chain. <i>PPP can be defined as "a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance". PPPs typically do not include service contracts or turnkey construction contracts, which are categorized as public procurement projects, or the privatization of utilities where there is a limited ongoing role for the public sector. An increasing number of countries are enshrining a definition of PPPs in their laws, each tailoring the definition to their institutional and legal particularities.</i>

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Priority commodity value chains, PC _i	Commodity value chains (whether staple, cash or high value) on which government places priority.	PC _i	List of the known priority commodities of the country. list {PC _i }	Government policy documents, policy statements
2. Percent of volume of trade between smallholders and target buyers of the priority commodity i, t _{smhi}	It is the volume of trade (in term of value) attributed to smallholders as a share of the total volume of trade for each of the priority commodity i, PC _i .	- Total volume of trade for the priority commodity, V _{Ti} - Volume of trade between smallholders and target buyers, V _{smhi}	$t_{smhi} = V_{smhi} / V_{Ti}$	Industry data
3. Percentage of smallholders as part of the total suppliers, supplying that market of the priority commodity i, n _{smhi}	Share of smallholders that have been involved in supplying that market of the priority commodity value chain.	- Number of smallholders integrated into the value chain of the priority commodity i, N _{smhi} - Total suppliers that are supplying the market of the value chain of the priority commodity i, N _{Ti}	$n_{smhi} = N_{smhi} / N_{Ti}$	
4. Priority commodity value chains for which a PPP is established with strong linkage to smallholder agriculture, PCsmh _i	It is the priority agricultural commodity value chain for which the volume of trade (in term of value) attributed to smallholders is at <u>least 50%</u> of the total volume of trade of the value chain; and the smallholders <u>represent more that 50%</u> of the total suppliers.	{t _{smhi} ; n _{smhi} } for each of the PC _i	list {PCsmh _i } = {PC _i / (t _{smhi} x n _{smhi}) >= 25% }	

5. Indicator Computing For a given year(i), **the Number of priority agricultural commodity value chains for which a PPP is established with strong linkage to smallholder agriculture**, is **Nc = count (list {PCsmh_i})** .

Theme 4
Eradicating Poverty through Agriculture
Performance Category **PC 4.3 Youth job in agriculture**
1. Objective of the PC

Engage youth in agricultural sector development to contribute to reduce level of unemployment and poverty.

2. Performance Target
Create job opportunities for at least 30% of the youth in agricultural value chains, from the year 2015 to the year 2025.
Reference in the Malabo Declaration:
Malabo Decl. 4(c)
3. Performance Indicator

Indicator	Definition / Explanation
Percentage of youth that is engaged in new job opportunities in agriculture value chains, ($\dagger Y_{th}$)	Youth here refers to the mature young of 15-35 old age range. The percentage in the indicator refers to the share of the total number of that group of age that has been given a new job in agriculture, with a counting starting from the year 2015, and this do not include the youth already working in agriculture. Approach for creating job for youth may include improving the skills profile, employability and entrepreneurship for the youth to closing the skills gap in the sector to boost private business initiated the youth. Creating skills development opportunities for youth (female and male) to access technical and vocational education and training (TVET) in agricultural value chains is therefore key to trigger private initiatives by the youth.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Total number of youth at working age in the country, TN_{yth}	Population of 15-34 old age range in the country, considered as of mature young at working age.	Demographic data		National bureau of statistics
2. Number of youth that is engaged in new jobs in agricultural value chains, (cumulative counting from the year 2015), AgN_{yth}	The youth (male and female) that is offered new job opportunities in agricultural value chains are those: - who do any agriculture related work as paid employees for any agriculture enterprise or SME ($AgN_{yth,E}$); - who work as self-employed in their own business or profession or on their own farm ($AgN_{yth,SE}$); - who work 15 hours per week or more as unpaid workers in a family-operated enterprise ($AgN_{yth,FE}$).	Cumulative number of the new jobs created within sub sectors related to agriculture for the youth by existing enterprises. This include "paid employment; "self-employment". $AgNY_{th} = AgN_{yth,E} + AgN_{yth,SE} + AgN_{yth,FE}$	Sum of all reported numbers from all enterprises	1. Enterprise Survey 2. Establishment Census 3. Integrated Business Enterprise Survey 4. Integrated Household Living Conditions Survey 5. National Agriculture Survey

5. Indicator Computing

 For a given year(t), the **percentage of youth that is engaged in new job opportunities in agriculture value chains**, is :
 $\dagger Y_{th,t} = 100 \times AgN_{yth} / TN_{yth}$

Theme 4 *Eradicating Poverty through Agriculture*

Performance Category **PC 4.4 Women participation in Agriculture**

1. Objective of the PC Promote initiatives that facilitate preferential entry and participation for women in gainful and attractive agri-business opportunities.

2. Performance Target Ensure that 20% of rural women have access to productive assets, including land, credit, inputs and financial services and information (empowered) by 2023.

Reference in the Malabo Declaration: Malabo Decl. 4(d): *In the FTYP of the AU Agenda 2063 (Ref: Asp.6/Goal.17/PA.1/trq.2)*

3. Performance Indicator

Indicator	Definition / Explanation
Proportion of rural women that are empowered in agriculture, $\dagger WE$	Women empowerment in agriculture will be measured accordingly with the five domains of empowerment (5DE) in agriculture. These domains are: (1) <i>decisions about agricultural production</i> , (2) <i>access to and decision-making power about productive resources</i> , (3) <i>control of use of income</i> , (4) <i>leadership in the community</i> , and (5) <i>time allocation</i> .

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Total number of rural women engaged in agriculture, N_{tw}	Total number of rural women that engaged in agriculture	Nw from country statistics		National Statistics
2. Proportion of rural women that make Decisions about agricultural production, $\dagger DE_1$	Production: Sole or joint decisionmaking over food and cash-crop farming, livestock, and fisheries as well as autonomy in agricultural production.	Number of women that have: a) Input in productive decisions and b) Autonomy in production, NDE_1	$\dagger DE_1 = NDE_1 / N_{tw}$	National Statistics
3. Proportion of rural women that have Access to and decision-making power about productive resources, $\dagger DE_2$	Resources: Ownership, access to, and decisionmaking power over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit	Number of women that have: a)Ownership of assets, b)Purchase, sale or transfer of assets, c)Access to and decisions about credit, NDE_2	$\dagger DE_2 = NDE_2 / Nw$	National Statistics
4. Proportion of rural women that have Control of use of income, $\dagger DE_3$	Income: Sole or joint control over income and expenditures	Number of women that have Control over use of income, NDE_3	$\dagger DE_3 = NDE_3 / N_{tw}$	National Statistics
5. Proportion of rural women that have Leadership in the community, $\dagger DE_4$	Leadership: Membership in economic or social groups and comfort in speaking in public	Number of women that have: a) Group member and b) Speaking in public, NDE_4	$\dagger DE_4 = NDE_4 / Nw$	National Statistics
6. Proportion of rural women that have Time allocation for leisure, $\dagger DE_5$	Time: Allocation of time to productive and domestic tasks and satisfaction with the available time for leisure activities	Number of women that are able to manage their time amongst: a) Workload and b) Leisure, NDE_5	$\dagger DE_5 = NDE_5 / N_{tw}$	National Statistics
7. Number of rural women empowered in agriculture, NwE	The proportion of rural women that are empowered can be generated for the country using mathematical set method to provide the overall proportion of women that meet at least 4 of the above-mentioned 5 domains (or approx. 80% of the reported domains of availed data) .	Use mathematical set method (using individual numbers to avoid double counting) to generate the total number of women that meet at least 4 of the 5 domains (or approx. 80% of the reported domains of availed data) : NwE	$NwE = f(NDE_1, NDE_2, NDE_3, NDE_4, NDE_5)$	National Statistics

5. Indicator Computing For a given year(t), the **proportion of rural women that are empowered in agriculture**, is $\dagger WE = 100 \times NwE / N_{tw}$

Performance theme 5:
Intra-African Trade in
Agriculture Commodities and
services

Theme 5

Intra-African Trade in Agriculture Commodities

Performance Category **PC 5.1 Intra-African Trade in agriculture commodities and services**

1. Objective of the PC

Promote intra-African trade in agriculture commodities and services.

2. Performance Target

Triple intra-African trade in agricultural commodities and services, by the year 2025 from the year 2015.
Reference in the Malabo Declaration: Malabo Decl. 5(a)

3. Performance Indicator

Indicator	Definition / Explanation
Growth rate of the value of trade of agricultural commodities and services within Africa, in constant US dollars (\uparrow IAT).	Total agricultural imports from African countries are expressed in terms of value, in constant US dollars. They cover all movements of agricultural goods and services into the country from African countries, during the reference period. They include commercial trade, food aid granted on specific terms, donated quantities and estimates of unrecorded trade.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Value of intra-African trade - imports (M_i) and exports (X_i) for agriculture goods and services, in current US dollars.	Total value of agricultural goods and services traded (imports and exports) by African countries from African sources in current US dollars.	Agricultural products including agricultural processed products (Standard International Trade Classification or SITC sections 0, 1, 2, 4 minus 27 and 28) - Food: food and live animals, beverages and tobacco, animal and vegetable oils, fats and waxes, oilseeds and oleaginous fruit (SITC sections 0, 1, 4 and division 22), of which: - Fish (SITC division 03), and - Other food products and live animals, beverages and tobacco, animal and vegetable oils, fats and waxes, oilseeds and oleaginous fruit (SITC sections 0, 1, 4 and division 22 less division 03). - Raw materials: hides, skins and furskins, raw, crude rubber (including synthetic and reclaimed), cork and wood, pulp and waste paper, textile fibers and their wastes, crude animal and vegetable materials, n.e.s. (SITC divisions 21, 23, 24, 25, 26, 29).		National statistics UNCTAD WTO UNECA RECS
2. Unit value of imported (P_{Mi}) and exported (P_{Xi}) agriculture products	C.I.F. and F.O.B. prices of agricultural products traded among African countries.	Data of international trade are usually in US\$. Prices of internationally traded commodities are also in US\$.		National statistics UNCTAD WTO
3. Trade (import or export) value indexes (pmx)	Composite prices of agricultural products traded (imports or exports) among African countries.	$pmx = \frac{\sum_{i=1}^n (P_{Mi} * \bar{M}_i^{2010} + P_{Xi} * \bar{X}_i^{2010})}{\sum_{i=1}^n (M_i^{2010} + X_i^{2010})}$		
4. Value of intra-African trade (imports and exports) for agriculture goods and services, in constant US dollars 2010 (IAT)		i)- Value of intra- African imports for agriculture goods , IAMg ii)- Value of intra- African imports for agriculture services , IAMs iii)- Value of intra- African exports for agriculture goods , IAXg iv)- Value of intra- African exports for agriculture services , IAXs	$IAT = \frac{\sum_i (Mi + Xi)}{pmx}$ $IAT = IAMg + IAMs + IAXg + IAXs$	

5. Indicator Computing

For a given year(t), the **Growth rate of the value of trade of agricultural commodities and services within Africa, in constant US dollars** (in %), is : \uparrow IAT_t = 100 x (IAT_t - IAT₂₀₁₅) / IAT₂₀₁₅

Theme 5

Intra-African Trade in Agriculture Commodities

 Performance Category: **PC 5.2i Intra-African Trade Policies and institutional conditions**

 1. Objective of the PC

Create and enhance regional and continental policies and institutional conditions and support systems to simplify and formalize the current trade practices to permit the achievement of tripling intra-African trade; including the promotion of the African Common position on agriculture-related international trade negotiations and partnership agreements.

 2. Performance Target

Fully establish trade facilitation measures by reaching 100% of Trade Facilitation Index by 2025.

Reference in the Malabo Declaration: Malabo Decl. 5(b).

 3. Performance Indicator

Indicator	Definition / Explanation
Trade Facilitation Index (TFI)	Trade facilitation involves the reduction of transaction costs associated with institutional/non-tariff barriers. This will enhance trans-border movements of goods and services. Establishment of trade facilitation in this case include all the interrelated measures that go beyond the agriculture sector, but contribute significantly to trade of agriculture commodities and services.

 4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Physical infrastructure (PI)	Physical infrastructure captures the availability and quality of transport infrastructure required to facilitate the within-country- and cross border movement of goods	1. Quality of roads 2. Quality of airports 3. Quality of seaports 4. Quality of railways	Normalize each indicator as 0-100 and find simple average of all four indicators	World Economic Forum (WEF) Global Competitiveness Index (GCI)
2. Information and communication technology (ICT)	Information and communication technology measures the quality and extent of use, absorption, and procurement of information and communication technologies in an economy	1. Firm level technology absorption 2. FDI and technology transfer 3. Availability of latest technology 4. Government procurement of advanced technology 5. Individuals using internet 6. Fixed telephone lines 7. Internet subscription	Normalize each indicator as 0-100 and find simple average of all seven indicators	World Economic Forum (WEF) Global Competitiveness Index (GCI)
3. Border administration (BA)	Border administration quantifies the ease of trading across borders as well as the level of transparency and efficiency of customs formalities and administration at a country's border.	1. Number of documents to export 2. Number of Days to export 3. Costs to export 4. Number of documents to import 5. Number of Days to import 6. Costs to import	Normalize each indicator as 0-100 and find simple average of all six indicators	World Bank's (WB) Doing Business (DB).
4. Bilateral Agricultural trade related agreements (ATA)	Proportion of countries with bilateral agricultural trade related agreements (in %)	- Number of countries with bilateral agricultural trade related agreements (NTA)	$ATA = NTA/54 \times 100$	Ministry of Agriculture
5. Immigration (IM)	Ease of entry into country (in %)	Sum all: - Number of countries with visa free entry (NVF) - Number of countries with visa on arrival (VA).	$IM = (NVF+VA)/54 \times 100$	Immigration Department

 5. Indicator Computing

For each year(t), the Trade Facilitation Index, is $TFI = (PI + ICT + BA + ATA + IM)/5$

Theme 5
Intra-African Trade in Agriculture Commodities
Performance Category **PC 5.2ii Intra-African Trade Policies and institutional conditions**
1. Objective of the PC

Create and enhance regional and continental policies and institutional conditions and support systems to simplify and formalize the current trade practices to permit the achievement of intra-African trade target; including the promotion of the African Common position on agriculture-related international trade negotiations and partnership agreements.

2. Performance Target

Reduce the Domestic Food Price Volatility Index to less than 7.5% by 2025.

Reference in the Malabo Declaration:

Malabo Decl. 5(b)

3. Performance Indicator

Indicator	Definition / Explanation
Domestic Food Price Volatility Index (CV)	The Domestic Food Price Volatility Index measures the variability in the relative price of food in a country. It is a proxy of the quality of the functioning of food markets were by suppressing barriers to trade, expanding volumes and reducing transaction costs and monopolies, prices should adopt more regular and flat patterns. The indicator is calculated from the monthly Domestic Food Price Level Index using monthly consumer and general food price indices and purchasing power parity data from the International Comparison Program.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Food price indices (PF)		Monthly domestic Food Price Level Index using monthly consumer and general food price indices	The data is available in the Bureau of statistics.	National statistics FAO
2. Coefficient of variation of food price Index	The coefficient of variation, also known as relative standard deviation, is a measure of the relative dispersion of a series of data around its mean. It is defined as the ratio of the standard deviation to the mean. It is often used to compare the degree of variability between series which do not have the same unit. The greater the coefficient of variation is, the greater the dispersion to the mean of the data.	Monthly domestic Food Price Level Index using monthly consumer and general food price indices	$CV = \frac{\sigma}{\mu}$ where $\sigma = \sqrt{\frac{\sum_{t=1}^T (P_t - \bar{P})^2}{T-1}}$ Details in Annex	

5. Indicator Computing

For a given year(t), the Domestic Food Price Volatility Index is CV.

Performance theme 6:
Resilience to Climate Variability

Theme 6		<i>Resilience to Climate Variability</i>		
Performance Category		PC 6.1i Resilience to climate related risks		
1. Objective of the PC	Promote initiatives of building resilience of production systems to reduce vulnerabilities of the livelihoods of African population to climate variability and other related risks.			
2. Performance Target	Ensure that at least 30% of farm, pastoral, and fisher households are resilient to climate and weather related risks, by the year 2025.			
	<i>Reference in the Malabo Declaration:</i>		Malabo Decl. 6(a)	
3. Performance Indicator	Indicator	Definition / Explanation		
	Percentage of farm, pastoral, and fisher households that are resilient to climate and weather related shocks (IRAgHh).	Resilience refers to the ability of people, households, communities, countries and systems to mitigate, adapt to and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.		
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods
	1. Total number of farm, pastoral, and fisher households, NagHH	It is the total number of farm, pastoral, and fisher households, as availed by the country agriculture statistics.		NagHH
	2. Number of farm, pastoral, and fisher households <u>that are resilient</u> to climate variability and related risks, NRagHH	Farm, pastoral, and fisher households that are resilient are considered here as the households that are able to recover from natural and human-induced shocks. The household resilience can be measured with the FAO's Resilience Index Measurement and Analysis (RIMA) model. As resilience is a context-specific concept, dimensions change depending on the context. FAO considered dimensions of resilience into two categories which include <u>physical dimensions</u> (i.e. income and food access; access to basic services; assets; social safety nets; climate change; and enabling institutional environment), and <u>capacity dimensions</u> (adaptive capacity; and sensitivity).	Data from resilience analysis in the country for analysing household resilience through the FAO's RIMA model, can be used to estimate the number of households that are resilient to climate variability and related risks. With the RIMA model, a resilient household is appreciated through the household resilience index, R_i	NRagHH
	Household resilience index, R_i	It is a composite index captures both physical and capacity dimensions and can be composed of latent variables estimated through various techniques. <ul style="list-style-type: none"> Exposure to climate related risks; Time required to recover; Income level and its diversification Asset ownership such as land and livestock Access to Social safety nets such as food assistance and social security Access to basic services such as water, health care, electricity, etc. Households adaptive capacity which is linked to education and diversity of income sources The stability of all these factors over time 	Latent variables to estimate a household resilience R_i , include: <ul style="list-style-type: none"> Access to Basic Social services (ABS_i); Agricultural Assets (AA_i); Non-Agricultural Assets (NAA_i); Income and Food Access (IFA); Enabling Institutional Environment (EIE); Agricultural Practice and Technology (APT); Social Safety Nets (SSN); Climate Change (CC); Sensitivity (S); Adaptive Capacity (AC). $R_i = f(IFA_i, ABS_i, AA_i, NAA_i, APT_i, SSN_i, CC_i, EIE_i, S_i, AC_i)$	R_i is function of the listed parameters as shown in the formula below.
5. Indicator Computing	For a given year(t), the Percentage of farm, pastoral, and fisher households that are resilient to climate and weather related shocks (in %), is : $\%IRAgHh_t = 100 \times NRagHH/NagHH$			

Theme 6		Resilience to Climate Variability		
Performance Category		PC 6.1ii Resilience to climate related risks		
1. Objective of the PC	Promote initiatives of building resilience of production systems to reduce vulnerabilities of the livelihoods of African population to climate variability and other related risks.			
2. Performance Target	Ensure that at least 30% of agricultural land is placed under sustainable land management practice.			
	<i>Reference in the Malabo Declaration:</i> Malabo Decl. 6(a) ...In the FTYP of the AU Agenda 2063 (Ref: Asp.1/Goal.7/PA.1/trq.1)			
3. Performance Indicator	Indicator	Definition / Explanation		
	Share of agriculture land under sustainable land management practices (SSLM).	Sustainable land management (SLM) is the adoption of land use systems that through appropriate management practices, enables land users to maximise the economic and social benefits from the land while maintaining or enhancing the ecological support functions of the land resources (TerrAfrica). SLM combines technologies, policies, and activities aimed at integrating socioeconomic principles with environmental concerns, so as to simultaneously: maintain and enhance production (productivity); reduce the level of production risk, and enhance soil capacity to buffer against degradation processes (stability/resilience); protect the potential of natural resources and prevent degradation of soil and water quality (protection); be economically viable (viability); and be socially acceptable, and assure access to the benefits from improved land management (acceptability/equity).		
4. Disaggregation	Parameter/ Unit	Definition	Data required	Computing Methods
	1. Agriculture area under SLM (ASLM)	Area of land that is under SLM practices <i>Agronomic measures</i> ; measures that improve soil cover (e.g. green cover, mulch); measures that enhance organic matter / soil fertility (e.g. manuring); soil surface treatment (e.g. conservation tillage); subsurface treatment (e.g. deep ripping). <i>Vegetative measures</i> ; plantation / reseeded of tree and shrub species (e.g. live fences; tree crows), grasses and perennial herbaceous plants (e.g. grass strips). <i>Structural measures</i> : terraces (bench, forward / backward sloping); bunds banks / level, graded); dams, pans; ditches (level, graded); walls, barriers, palisades. <i>Management measures</i> ; change of land use type (e.g. area enclosure); change of management / intensity level (e.g. from grazing to cut-and-carry); major change in timing of activities; control / change of species composition.	Identified agriculture areas in the country under each SLM practice, ASLM _j	Sum of all the recorded areas under different SLM practices ASLM = Σ(ASLM _j)
	2. Total Agriculture Area (AA)	Agriculture land including cropland and rangeland	Identified agriculture areas of the country, Aa _j	Sum of all the recorded agriculture area Aa _i AA = ΣAa _j
5. Indicator Computing	For a given year(t), the share of agriculture land under SLM practices is $SSLM_t = 100 \times ASLM / AA$			

Theme 6

Resilience to Climate Variability

Performance Category **PC 6.2 Investment in resilience building**

1. Objective of the PC

Enhance investments for resilience building initiatives to protect households and vulnerable social groups, as well as vulnerable ecosystems.

2. Performance Target

Create permanent investment budget-lines to respond to spending needs on resilience building initiatives, especially for disaster preparedness plans, functioning early warning and response systems, social safety nets, and weather-based index insurance, from 2015 to 2025.

Reference in the Malabo Declaration: Malabo Decl. 6(b)

3. Performance Indicator

Indicator	Definition / Explanation
Existence of government budget-lines to respond to spending needs on resilience building initiatives (EI_{RB})	Government spending on resilience building initiatives refers to the total program spending including spending on benefits and on administrative costs. The indicator captures both the recurrent and capital program budget and is based on administrative program records. Program level spending is presented as a percent of GDP or national budget of the respective year and is aggregated for all programs that contribute to building resilience.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Existence of government budget-lines on disaster preparedness policy and strategy, EI_{RB1}	The Budget-lines includes funding needs for establishing Disaster Preparedness policy and strategy, and for its full implementation.	- Availability of the budget lines with adequate funds in the national budget;	EI_{RB1} is estimated by: - "0" if No - "100%" if Yes	
2. Existence of government budget-lines on Early warning and response systems and social safety nets, EI_{RB2}	The Budget-lines includes funding needs to adequately fund early warning and response systems.	- Availability of well functioning and funded Disaster Risk Management institutions and No. of vulnerable households served by social protection schemes;	EI_{RB2} is estimated by: - "0" if No - "100%" if Yes	
3. Number (proportion) of households covered by index insurance, EI_{RB3}	Existence of index insurance scheme and proportion of households who subscribe weather based index insurance	- Number of households covered by weather based index insurance schemes, z , - Total number of households, Z	EI_{RB3} is the Head count or proportions, and is calculated with the formula: $z/Z \times 100$	

5. Indicator Computing

For a given year(t), the **Existence of government budget-lines to respond to spending needs on resilience building initiatives** (in %), is : $EI_{RB} = \text{Average } (EI_{RBi})_{i=1 \text{ to } 3}$

Performance theme 7:
Mutual Accountability for
Actions and Results

Theme 7

Mutual Accountability for Actions and Results

Performance Category **PC 7.1 Country capacity for evidence based planning, impl. and M&E**

1. Objective of the PC

Countries to increase capacity to generate, analyse and use data, information, knowlegde and innovations.

2. Performance Target

Reach at least 63 for the Index of capacity to generate and use agriculture statistical data and information (ASCI), by 2025.

Reference in the Malabo Declaration:

Malabo Decl. 7(c),

target set as average of the 10 best ranked countries in the Africa Country Assessment

3. Performance Indicator

Indicator	Definition / Explanation
Index of capacity to generate and use agriculture statistical data and information (ASCI).	ASCI (Agricultural Statistics Capacity Indicator) is a multidimensional indicator that measures country's capacity to produce timely and reliable agricultural and rural statistics and provides evidence on the current level of development of national agricultural and rural statistics systems. It is a composite index assessing four dimensions, each comprising an aggregation of a number of different elements/components. The four dimensions are: i) the institutional infrastructure; ii) the resources; iii) the statistical methods and practices and iv) the availability of statistical information. The indicator has been developed in the framework of the Global strategy to develop Agricultural and rural Statistics and is used in other regions in the world.

4. Disaggragation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. ASCI (Agricultural Statistics Capacity Indicator)	It is a composite index assessing four dimensions of statistical capacity at national level in the field of agriculture.	Data provided by countries (through a specific questionnaire) every two years. Baseline available for 2013 and new indicator to be collected in 2015. Countries can use directly the already calculated Index availed by the AfDB for the Biennial Report.	Scores are computed by AfDB and published according to the overall methodology available at: http://www.gsars.org/wp-content/uploads/2014/09/Guidelines_Country-Assessment_FINAL.pdf	Countries/ AfDB

5. Indicator Computing

For a given year(t), ASCI can be reported as already computed and available at the link above.

Theme 7

Mutual Accountability for Actions and Results

Performance Category **PC 7.2 Peer Review and Mutual Accountability**

1. **Objective of the PC**

Establish mechanisms and systems to measure, track and report performance of Member States with respect to progress on key commitments agreed upon.

2. **Performance Target**

Foster alignment, harmonization and coordination among multi-sectorial efforts and multi-institutional platforms for peer review, mutual learning and mutual accountability, (reach 100% for the Existence of inclusive institutionalized mechanisms and platforms for mutual accountability and peer review, ECI) by 2018.

Reference in the Malabo Declaration: Malabo Decl. 7(b)

3. **Performance Indicator**

Indicator	Definition / Explanation
Existence of inclusive institutionalized mechanisms and platforms for mutual accountability and peer review (ECI).	This indicator measures the existence of an institutionalized mechanism and platform for mutual accountability, supporting evidence-based review and dialogue on the implementation of the NAIP and other agricultural related commitments

4. **Disaggregation**

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Adherence to mutual accountability principles: AMAP	This parameter assesses the extent to which a country's review process follows the six key principles of mutual accountability (MAP): i) Shared vision, objectives and strategies ii) Agreed performance indicators iii) Evidence-based analysis iv) Inclusive of key stakeholders v) Transparent dialogue vi) Commitment to implement recommendation from review	Number of mutual accountability principles satisfied (MAPS) by the country	$AMAP = (MAPS/6) * 100$	CAADP focal person: country JSR or other annual agricultural sector review report
2. Existence of mutual accountability mechanism and platform: EMAP	This parameter assesses the extent to which a country's review mechanism follows the twelve (12) best practices (TBP) of a robust review mechanism. A country needs to have: 1. JSR Steering Committee 2. JSR Secretariat 3. JSR Terms of Reference 4. Financial and human resources 5. Broad group of relevant stakeholders for JSR 6. Assessment of existing agricultural policy dialogue and review processes; data quality and analytical capacities 7. Commissioned JSR relevant studies 8. JSR Review Team 9. JSR Report 10. JSR validation meeting 11. Action Plan 12. Experiences to share with other countries	Number of best practices satisfied (BPS) by the country	$EMAP = (BPS/12) * 100$	CAADP focal person: country JSR or other annual agricultural sector review report
3. Coverage of agricultural review report: CARR	This parameter assesses the coverage of the country's review report focusing on the six key areas of assessment (KAA): i) Development results ii) JSR Report iii) Financial and non-financial commitments including by NSAs iv) Policy implementation v) Assessment of linkages vi) Review recommendations	Number of key areas covered by the country's review report (NKAA)	$CARR = (NKAA/6) * 100$	CAADP focal person: country JSR or other annual agricultural sector review report

5. **Indicator Computing**

For a given year, the **Existence of inclusive institutionalized mechanisms for mutual accountability and peer review**, is : $ECI = (AMAP + EMAP + CARR) / 3$

Theme 7

Mutual Accountability for Actions and Results

Performance Category **PC 7.3 Biennial Agriculture Review Process**

1. Objective of the PC Institutionalize the use of the Biennial report to serve mutual accountability platforms, experiences sharing amongst African countries on agricultural development issues, and promote lessons learnt for performing on Malabo Declaration..

2. Performance Target **Conduct a biennial Agriculture Review Process that involves tracking, monitoring and reporting progress made in implementing the Malabo Declaration, by availing the regular country Biennial Report to the AU Assembly.**
Reference in the Malabo Declaration: Malabo Decl. 7(a)

3. Performance Indicator

Indicator	Definition / Explanation
Country Biennial Report submission (BR).	Report prepared using under the strategic guidance provided by the AUC and NPCA in collaboration with the RECs, and using the Reporting Template that has been availed on this proposed. The BR is the final report that has included amendments after validation : - at national level with a stakeholders' group established for this purpose (eg. country Joint Sector Review, JSR process) - at subregional level led by the RECs.

4. Disaggregation

Parameter/ Unit	Definition	Data required	Computing Methods	d. Source
1. Draft 1 country Biennial Report	It is draft Country Biennial Report that has been <u>validated at country level</u> , and has been <u>reviewed</u> with national stakeholders' amendments (eg. JSR process).	Availed Draft 1 that is submitted officially when failure in the next steps.	BR₁ = 25% if the step is fully completed and 0 if not.	
2. Quality of the Draft 1 of the Biennial Report	Number of parameters reported out of the total parameters proposed in the Template of Country Report.	n = number of parameters reported by the country N = total number of parameters reflected in the country reporting format	BR₂ = BR₁ + (25% * n/N) , as cumulated with the former steps.	
3. Draft 2 country BR	It is the draft Country Biennial Report that has been <u>validated at subregional level</u> , and which has taken into account amendments on data harmonization and alignment.	Participation of the country in the REC's technical alignment and political endorsement meeting. Availed Draft 3 that is submitted officially when failure in the next step.	- BR₃ = (BR₂ + 25%) , when the report is <u>discussed</u> at the meeting, and the <u>country has participated</u> in the discussion. - BR₃ = (BR₂ + 12.5%) , when the report is <u>discussed</u> at the meeting, and the <u>country has not participated</u> in the discussion. - BR₃ = BR₂ if this step is not reached.	
4. Submission to the AUC/NPCA through RECs	It is when the Country follows the endorsed process of submitting the final Biennial Report to the AUC/NPCA through the RECs.	Report submitted to the REC by the Country.	BR₄ = BR₃ + 25% , as cumulated value with the former steps if this step is fully reached, and BR₃ + 0 if it is not.	

5. Indicator Computing For a given year of the BR exercise, the Country Biennial Report submission, is assessed as: **BR = BR_k**, *whereas k is the step reached.*



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