MODULE 6: THEORY OF CHANGE FOR ADAPTATION IN THE AGRICULTURE SECTOR
Objectives

■ What is a theory of change and why do we need one?
■ Get a common understanding of the long-term adaptation goal for the agriculture sectors – what are we measuring with M&E
■ A theory of change for adaptation M&E and agriculture
■ Review of existing TOC for adaptation in the agriculture sector from key policies, where available
■ Identify the focus of what to monitor and evaluate on adaptation in the agriculture sector, e.g. impacts and vulnerabilities; processes; outcomes; budget
Overview

- Step 1: Definitions, example of TOC in policies and programmes
- Step 2: Define the purpose and objective of the adaptation M&E framework for the agricultural sectors
- Step 3: Identify the focus of what to monitor and evaluate on adaptation in the agriculture sector, e.g. impacts and vulnerabilities; processes; outcomes; budget
Designing an M&E framework and plan for adaptation in the agriculture sectors

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ADAPTATION GOALS AND ADAPTATION TOC IN POLICIES AND PROGRAMMES
Theory of Change – what and why?

• Narrative linking project activities with desired consequences – mechanisms, processes, etc.

• Closely linked to log-frame

• Links outputs, outcomes, impacts

• Makes assumptions explicit

• Framework for indicator selection

➢ Compare theories of change developed at beginning of intervention (predictive) and end of intervention (explanatory)
Definitions

1. A theory of change is a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context.

2. A TOC explains how a group of early and intermediate accomplishments sets the stage for producing long-range results. It articulates the assumptions about the process through which change will occur.

3. The causal sequence to achieve desired results (FAO)
Adaptation goals for agriculture

- Kenya NAP, agriculture action area: “Enhance the resilience of the agricultural value chain”
- Philippines NCCAP food security intermediate outcome: “Ensured food availability, stability, access, and safety amidst increasing climate change and disaster risks”
- Nepal ADS vision statement: “A self-reliant, sustainable, competitive, and inclusive agriculture sector that drives economic growth, and contributes to improved livelihoods and food and nutrition security leading to food sovereignty” – not specifically focused on adaptation
What does adaptation success look like – and how can we measure it?

What is successful adaptation?

- Actions that secure human well-being in the face of climate change
  - Enable development goals to be met despite climate change
  - Reduce losses/damages triggered by climate hazards despite CC
  - Secure improvements in health, economic well-being, etc.

How do we achieve this?

- Reduce exposure to climate hazards
- Reduce vulnerability, increase resilience, enhance adaptive capacity
A theory of change for adaptation M&E  
(project & programme level)

INPUTS  
(project/progammme)

OUTPUTS  
(products, services)

OUTCOMES  
reduced vulnerability, improved resilience, adaptive capacity, better climate risk management

IMPACTS  
improved human well-being (e.g. health, nutrition, poverty), reduced losses & damages (e.g. climate-related mortality, assets) relative to no-intervention baseline

Climate shocks and stresses

Source: Brooks, Nick; M&E training, Norfolk, UK: Based on theory of change developed for DFID BRACED programme, used for design of programme-level log-frame and programme & project level M&E systems

For supporting documents, see: https://www.gov.uk/international-development-funding/building-resilience-and-adaptation-to-climate-extremes-and-disasters-programme#project-documents
TOCs NAP Global Network

Theory of Change

Countries better able to achieve sustainable development goals in a changing climate

Reduced vulnerability of communities and ecosystems to the impacts of climate change

Greater strategic investments in climate-resilient development

Longer-term outcomes 4-5 years

- Higher quality of and more effective NAP processes in developing countries
- Greater political support and leadership for the NAP process
- More financial and technical resources available to support NAP processes

Medium-term Outcomes 2-3 years

- Active community of practice within and across countries that allows peers to call on each other for support in advancing their NAP processes
- Increased in-country technical and institutional capacity to advance NAP processes
- Better coordinated NAP support from bilateral development partners that is aligned with country priorities and leverages investments

Outputs

- Group of 15-20 countries to regularly meet and learn from each other on challenges and best practices re NAPs
- 30+ countries engaging with and requesting support from the Network, articulating their needs and sharing updates
- High quality body of knowledge and guidance on NAP processes, accessible in multiple formats and through various channels
- Group of 10+ bilateral donors with greater understanding of the NAP process actively working with each other

Strategies / activities

- Sustained peer learning & exchange
- National-level action
- Enhancing bilateral support
- Analysis, communications & knowledge
- Outreach and engagement
Uganda TOC for the agriculture sector NAP

Re-constructed NAP-Ag Theory of Change

Output
- Climate Resilience Governance
- Integration of climate change in extension services
- Climate Information and an early warning system
- Sustainable Natural Resource Management
- Integration of CCA in policies, plans and budgets
- Knowledge Management and Partnerships for Climate Action

Intermediate
- Climate change adaptation coordination and climate smart public service delivery
- Enhanced knowledge, capacities and learning in climate change adaptation
- Increased preparedness against climate change risks and disasters
- Ecosystem based adaptation
- Enhanced adaptive capacity at national and community levels
- Reduced vulnerability of agricultural systems

Long term outcomes
- Sustainable Agriculture
- Food and Nutrition Security
- Livelihood Improvement
- Economic Growth

Desired Impact
- A climate change resilient and sustainable agricultural

Drivers and Assumptions
- Political Will: Support at the highest level of governance that ensures that interventions are accorded high priority in planning and budgeting.
- Efficiency in implementation: Resources earmarked for implementation especially at the district level is used efficiently to generate outputs and outcomes as planned with a zero tolerance for resource mismanagement and corruption.
- Cohesive multi-sectoral approach to implementation: MAAIF obtains support from key stakeholders state and non-state actors to implement interventions in a coherent, and cohesive manner all pointed to achieving the vision of this plan without overlaps and duplication of effort.
TOCs within Mozambique’s M&E framework

**National Climate Change M&E Framework**

- **Adaptação**
  - 1 Indicator de Impacto - Indice de Vulnerabilidade
    - 1.1. Redução do Risco Climático (4 Indicadores)
    - 1.2. Recursos Hídricos (12 Indicadores)
    - 1.3. Agricultura, Pescas e Segurança Alimentar (19 indicadores)
    - 1.4. Proteção Social (5 indicadores)
    - 1.5. Saúde (6 indicadores)
    - 1.6. Biodiversidade (4 indicadores)
    - 1.7. Floresta (3 indicadores)
    - 1.8. Infraestruturas (9 indicadores)

- **Mitigação**
  - 1 Indicator de Impacto - Níveis de Emissão de CO2 per capita
    - 2.1. Energia (16 indicadores)
    - 2.2. Processos Industriais e Uso do Solo (3 indicadores)
    - 2.3. Agricultura, Floresta e Uso do Solo (10 indicadores)
    - 2.4. Resíduos (3 indicadores)

- Criar capacidade institucional e humana bem como explorar oportunidades de acesso a recursos tecnológicos e financeiros para implementar a ENAMMC

- Integração das MC no processo de Planificação
- Nível de Coordenação e resposta as Mudanças Climáticas
- Capacitação Institucional e Gestão de Conhecimento para as Mudanças Climáticas
- Nível de Planificação ao nível Local tendo em conta aspetos climáticos
- Nível de inclusão de aspectos de Mudanças Climáticas no processo de Orçamentação em Moçambique
Key elements of a TOC- Checklist

■ What is the adaptation goal you wish to achieve in the agriculture sectors? What are the outcomes and outputs? What is the role of the agriculture sector in reaching national adaptation goals?

■ What are the different pathways towards the final adaptation goal (they may already be articulated in e.g. the Agriculture Development Strategy, National Climate Change Strategy, NAP or other development or sectoral policies)? Determine the level of the ‘goal – national or sectoral’

■ How can the current policies, plans and programme portfolio within the agriculture sector help achieve the goal? Where are the bottlenecks to achieving the goal?

■ What are the barriers to achieve the adaptation goal?

■ What assumptions are you making?

■ Have you considered how pathways differ for different groups including those of different genders?

■ Have you identified outputs, outcomes and impacts where relevant, and located these on the pathway?
Map indicators to a TOC

Focus indicators on different crucial points of the TOC

1. **Process indicators**: Are institutional **climate risk management** processes improving?

2. **Outcomes**: Is **vulnerability** being reduced / **resilience** & **adaptive capacity** increased?

3. **Impacts**
   - Are **losses & damages** from climate shocks & stresses ~stable or declining*?
   - Is human **well-being** ~stable or improving* (health, nutrition, etc.)

4. **Climate shocks, events and stresses**- Are climate shocks increasing or decreasing?
PURPOSE, OBJECTIVE AND FOCUS OF THE M&E FRAMEWORK
What has already been monitored in terms of adaptation in the agricultural sectors

(content to be developed and presented by consultant)
Exercise 1: Purpose of the M&E Framework

- What purpose could an M&E framework for adaptation in the agriculture sector have? What are we trying to measure?
  - To learn how effective adaptation actions in the agriculture sector are being, and adjust course of future interventions? Including the measurement of differential impacts on women and men, socio-economic class, age, ability/disability
  - To monitor and evaluate the implementation of agriculture plans and strategies?
  - To report on adaptation spending in the agriculture sector?
  - For adaptive management of existing agricultural practices and sectoral priorities?

- Who are the target users of the M&E results, both within and outside the Ministry of Agriculture?
  - Ministry of Agriculture sectoral experts and decision-makers, planning units and/or M&E units; national development planners or Ministry of Planning; national climate change coordination body; farmers associations, women’s groups, indigenous people groups?
  - Ministry of environment, local level authorities implementing agricultural activities, global stakeholders such as UNFCCC?
Potential focus of the M&E framework

- M&E of climate change **hazards, impacts and** associated **vulnerabilities** in the agriculture sectors

- M&E of adaptation **processes** in the agriculture sectors: how policies, plans or interventions to address climate change adaptation have advanced in the agriculture sectors, and how the capacity to deliver these has enhanced

- M&E of adaptation **outcomes** in the agriculture sectors: changes brought about by the implementation of adaptation policies and interventions in the agriculture sectors, for example in terms of reduced losses and vulnerability to climate change or enhanced adaptive capacity at community, sub-national or national level
Exercise 2: Focus of the M&E Framework

- Are you looking to monitor how the climate is changing and what the impacts are on the agricultural sector, as well as on different actors?

- Are you aiming to monitor the advancement of a specific policy, plan or intervention and how this contributes to adaptation on the ground? E.g. a NAP, an Agriculture Development Strategy or Climate Smart Agriculture Strategy?

- Are you looking to monitor and evaluate the outputs/outcomes and/or impact of a portfolio of adaptation programmes in the agriculture sector, evaluating what works, what doesn’t? Is this done to inform future investment decisions?

- Are you looking to monitor and evaluate increased capacity of key (agricultural) stakeholders in delivering policies, plans and programmes related to adaptation?

- Do you wish to monitor and evaluate adaptive capacity in the agriculture sector in terms of e.g. changes in agricultural practices that make them and dependent people less vulnerable to climate change?

- Are you looking to monitor where and how adaptation funding is used, and by whom?
Focus of adaptation M&E for the agriculture sector in NAP-Ag countries

- **Kenya**: an M&E System has being developed to monitor the implementation of the Kenya Climate Smart Agriculture Implementation Framework.

- **Uganda**: a Performance Monitoring and Evaluation Framework was developed for the National Adaptation Plan of the Agriculture Sector. The draft Framework seeks to measure both adaptation processes and outcomes in the agriculture sector.

- **Uruguay**: As part of the conceptualization of the National Adaptation Plan to Climate Variability and Change for the Agriculture Sector (PNA-Agro and the Action Plan for 2025), a matrix of 32 indicators was elaborated. The identification of the indicators was performed by searching for synergies with the PNA-Agro and other existing indicators in the NDC and the SDGs, in order to track progress in the implementation of the four adaptation dimensions, namely Production system (9 indicators), Ecosystems and natural resources (9 indicators), Livelihoods (9 indicators), Institutional Capacities (5 indicators).
THANK YOU

FAO CBIT AFOLU TEAM

CAPACITY BUILDING INITIATIVE FOR TRANSPARENCY

FAO CBIT – AFOLU PROJECT

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