



Food and Agriculture Organization
of the United Nations

NAP for agriculture and fisheries

The role of NAPs in achieving adaptation priorities for
agriculture and fisheries sectors

NAP EXPO Asia - 2017– Parallel Sessions: Systems and Adaptation Solutions

Session supported by:



Federal Ministry for the
Environment, Nature Conservation,
Building and Nuclear Safety



Food and Agriculture Organization
of the United Nations



Empowered lives.
Resilient nations.

Introduction

Moderator

Beau Damen

Food and Agriculture Organization of the United Nations



Session Objective

To provide a space to **learn** about **experiences** to date with **adaptation** in the **agriculture and fisheries** sectors in the region, future adaptation **priorities** in these sectors and **how** the **NAP** can be used as a framework to **scale-up** effective, **sector-specific adaptation**

Your Objectives

Share your thoughts with me

- Take a piece of paper
- Write in big letters:
 - One interesting thing about yourself
 - One expectation that you have for the session
- Share with the person next to you
- Everyone put one hand in the air

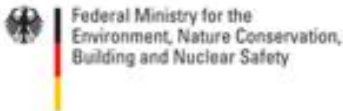
Context – NAP Ag Programme

Objective



Empowered lives.
Resilient nations.

Supported by:



based on a decision of the German Bundestag

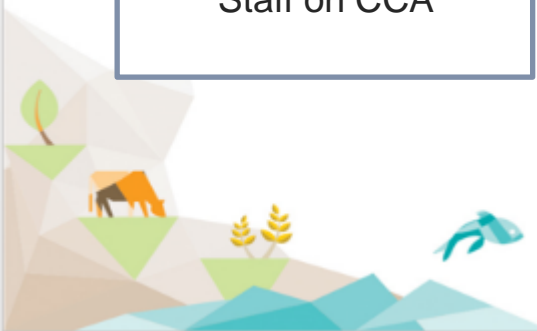
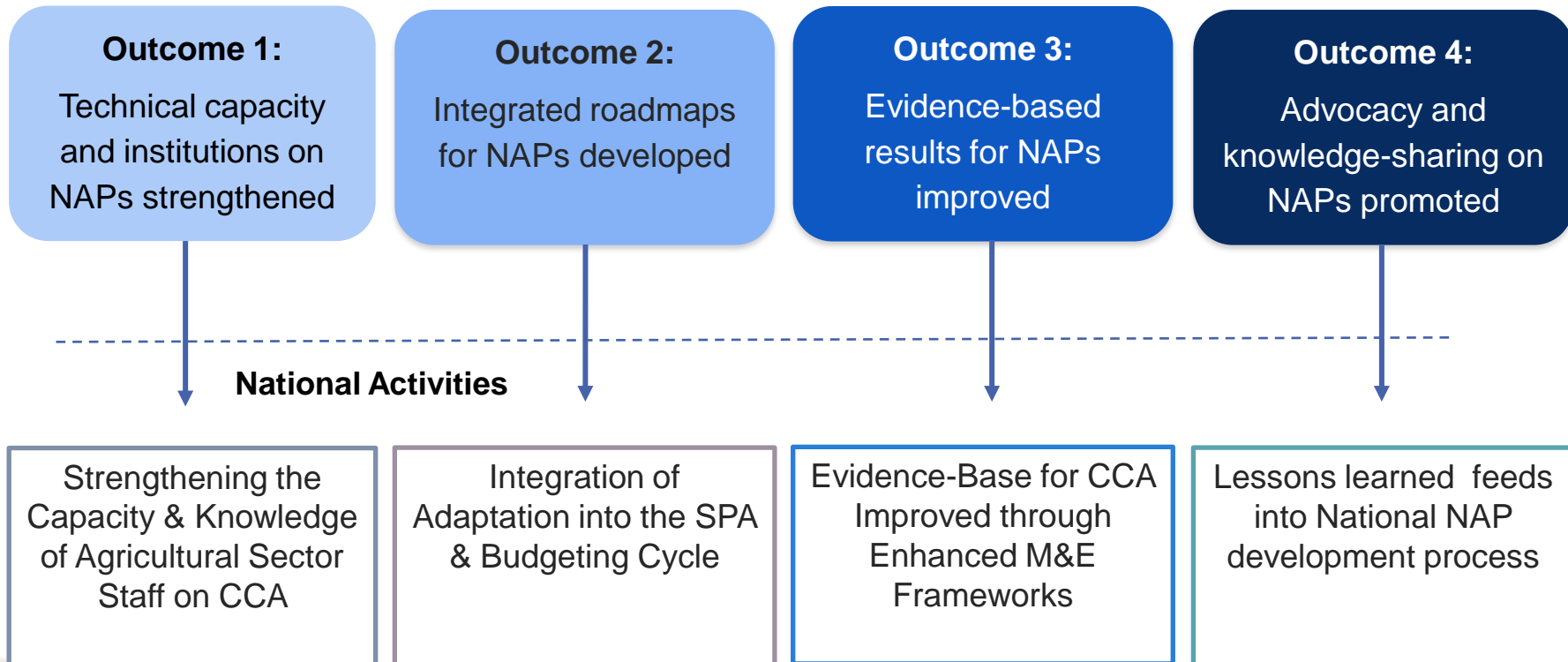
To **integrate** climate change **risks and opportunities** as they relate to **agriculture sector**-related livelihood options within **existing** national **planning** and **budgeting processes**

Key Features

- Global Programme
- Funded by the German Government (BMUB ICI)
- FAO and UNDP Joint Program
- Duration: 4 years (2015 to 2018)
- Global Programme Budget: US\$15 million

NAP-Ag Outcomes

Global Level



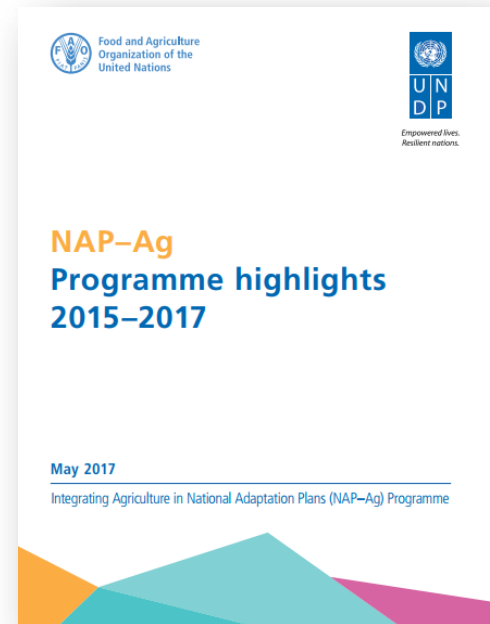
Where do we work?

11
Countries



NAP-Ag Programme Highlights 2015-2017 (II)

- 1. Advanced the development of climate change adaptation planning strategies and frameworks in the agriculture sectors in Kenya, Philippines, Thailand and Uganda**
- 2. Enhanced capacities of agriculture sector's decision-makers to appraise adaptation options, using cost-benefit analysis and impact evaluation, as a means to advance the NAP processes in Uganda, Uruguay and Zambia**
- 3. Initiated the leveraging of climate finance for the implementation of climate change adaptation strategies and frameworks in the agriculture sectors in Nepal, Thailand and Viet Nam**



NAP-Ag Programme Highlights 2015-2017 (ii)

4. Boosted capacity for gender mainstreaming through: technical training; incorporation of sex-disaggregated data and gender analysis into cost-benefit analyses and impact evaluations; and development of a tool to increase women's incomes in the agriculture sector's value chains



4. Catalysed global attention to the integration of agriculture into NAPs through engagement of NAP-Ag country representatives in: Least Developed Country Expert Group (LEG) training workshops and meetings; side events at COP 21 and COP 22; Adaptation Committee meetings; and NAP Expos



Panel Discussion

The role of NAPs in achieving adaptation priorities for agriculture and fisheries sectors

Moderator

Beau Damen

Food and Agriculture Organization of the United Nations

Panelists

Reichelle Celorico

Department of Agriculture, Philippines

Akarapon Houbcharaun

Office of Agriculture Economics, Thailand

Tran Dai Nghia

IPSARD, Vietnam



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Context

Adaptation and the Agriculture and Fisheries sectors in
Asia

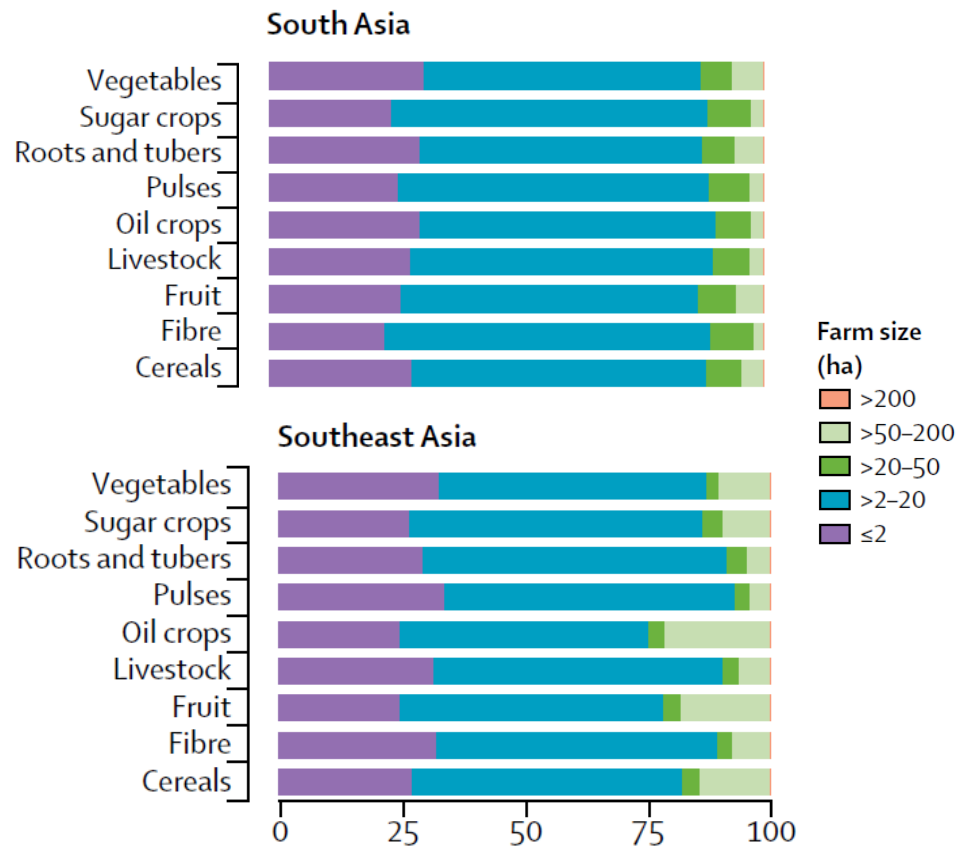
Beau Damen

FAO Regional Office for Asia and the Pacific

Agriculture sector relevance

- Crucial for regional health, security and economic development
- Sector in Asia is overwhelmingly dominated by small holder farmers
- Despite tremendous progress food insecurity and malnutrition persist

Production of key food groups by farm size (Production %)



Source: Herrero et al, 2017

Fisheries and Aquaculture sector relevance

- Fisheries and aquaculture are of vital importance
- Globally 50% of animal protein and essential nutrition to 400 million people in the poorest countries and nutrition for 4 billion people worldwide.
- One of the most widely traded and exported food products, especially for developing countries.
- Fisheries and aquaculture supply both directly and indirectly livelihoods to over 500 million people.



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Agriculture is a priority

Agriculture an overwhelming priority for country INDCs

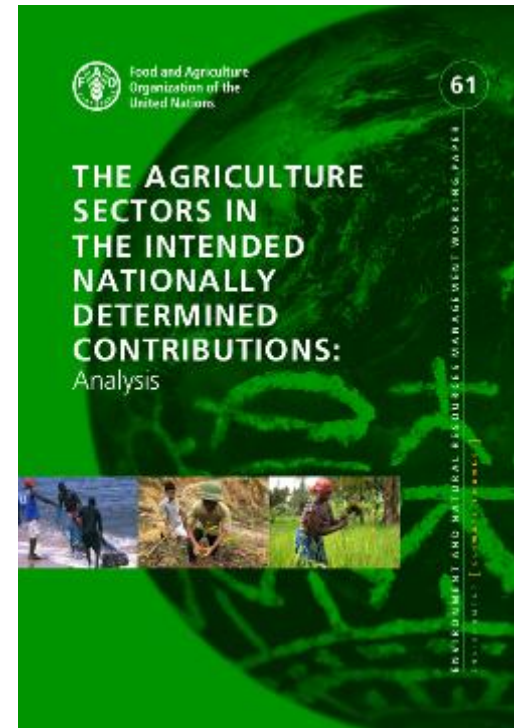
- Adaptation and mitigation actions in agricultural sectors included in 94% of all countries

Ag sectors are the foremost priority for adaptation in INDCs

- 130 of 188 countries include an adaptation section.
- 95% refer to crops and livestock
- 83% refer to forests
- 46% refer to fisheries and aquaculture.

Countries highlight the vulnerability of agriculture sectors to CC in their INDCs

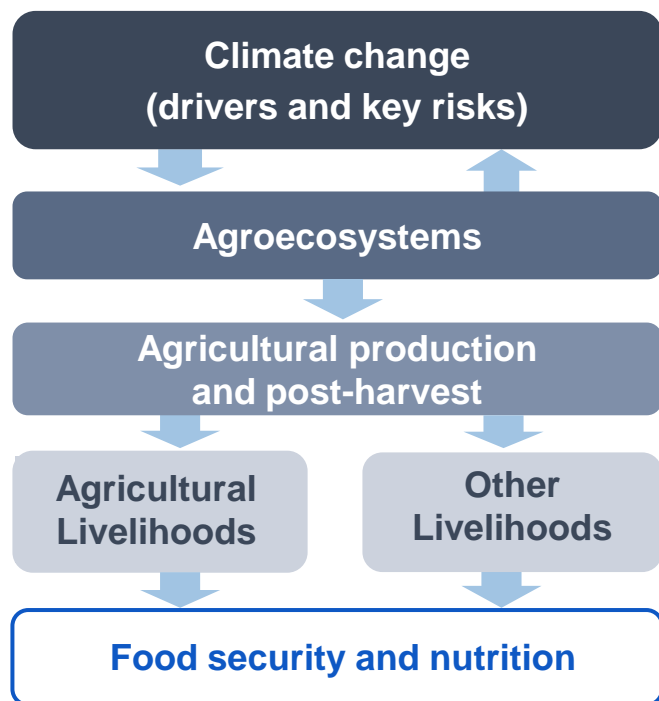
- 90% mention ag sector
- 60% mention freshwater resources



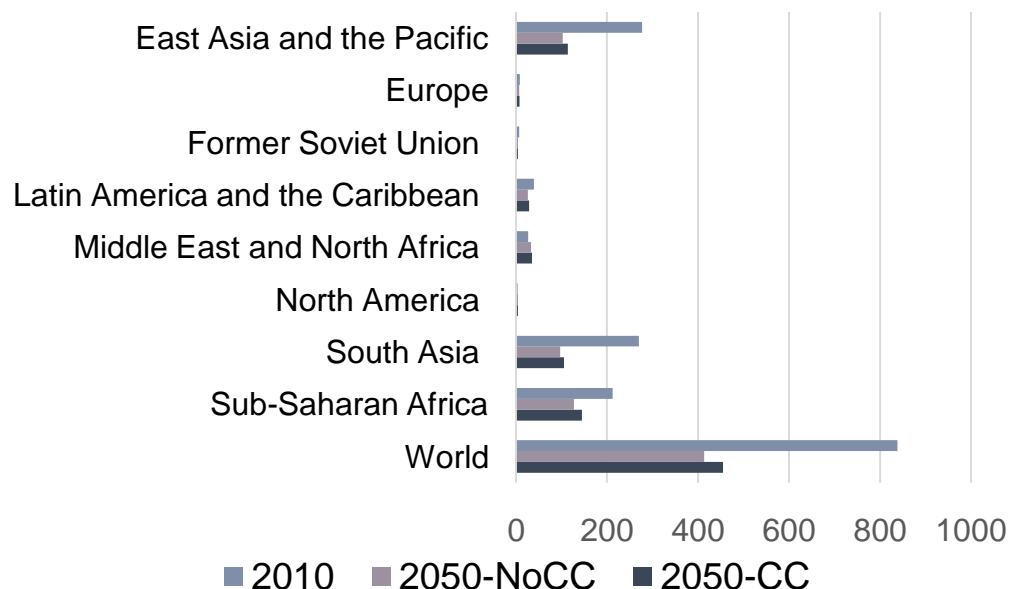
Source: FAO, 2016

Climate change impacts threaten food security

Links between climate change and food security
(Illustrative example)



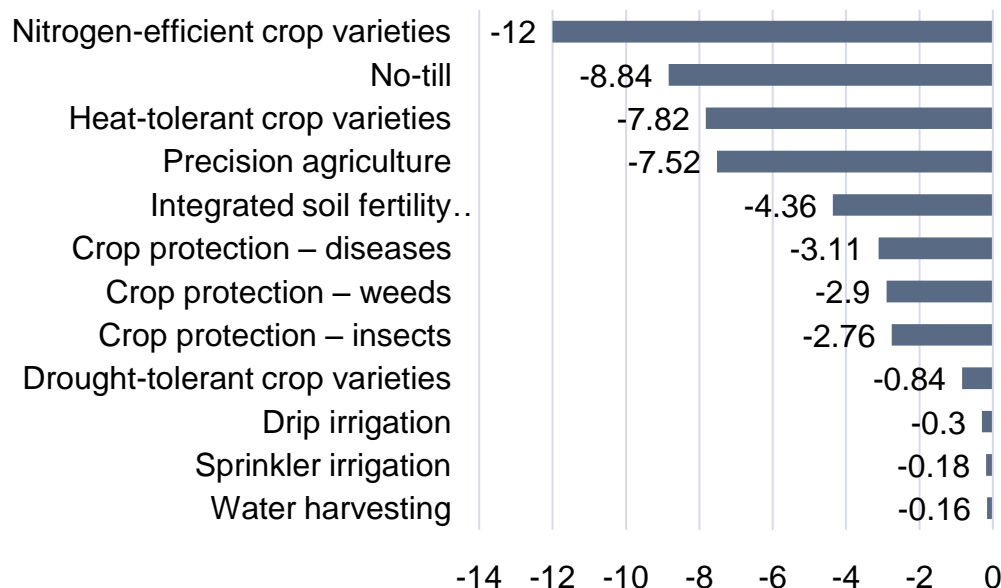
Impacts of climate change on population at risk of hunger in 2050, by region
(Million people)



Source: FAO, 2016 based on Wiebe et al, 2015

Improved production systems enhance food security

Change in 2050 in the number of people at risk of hunger, relative to the baseline scenario, after adoption of improved agricultural technologies
(Percentage difference in population at risk)

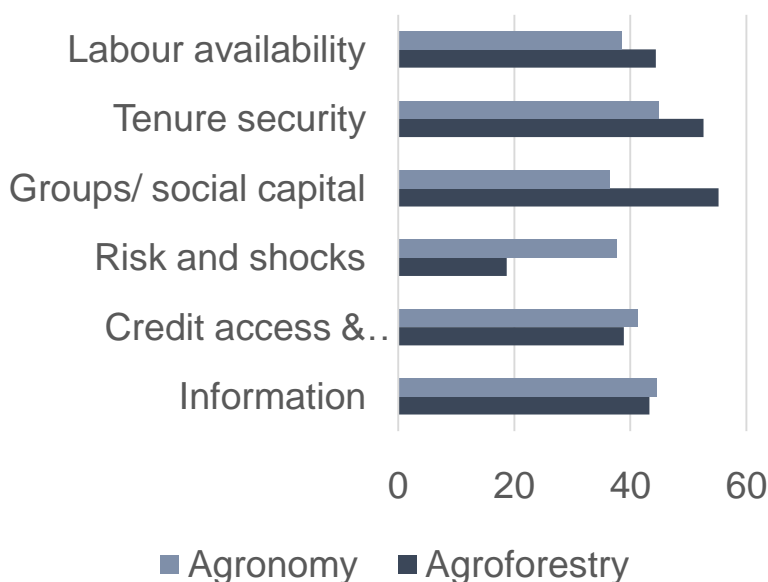


- Smallholder agriculture particularly vulnerable to climate change risks and impacts
- Rural women are among the most vulnerable
- Evidence growing that we can improve smallholder resilience through:
 - Improved production systems
 - Building more resilient livelihoods for vulnerable populations

Barriers and finance

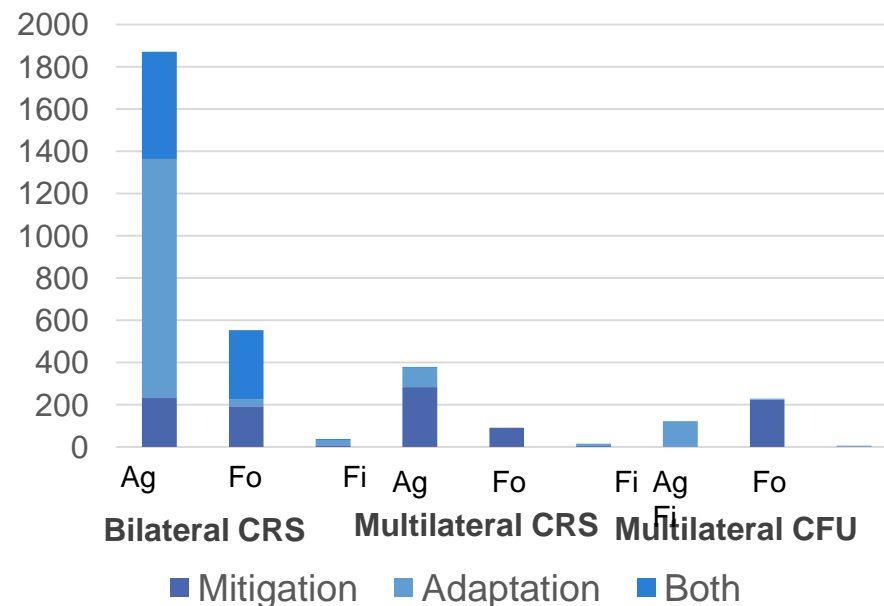
Barriers constrain the adoption of improved technologies and practices as reported in the literature

(Share of studies where variable was statistically significant (%))



Average annual international public finance for mitigation and/or adaptation by sector and source, 2010-2014

(Millions of US\$)



Source: FAO, 2016

Note: 'CRS' refers to OECD's Creditor Reporting System and 'CFU' to ODI's Climate Fund Update

Source: FAO, 2016 based on information from OECD and ODI

FAO on the ground

Examples



E-Agriculture



Ecosystem-based
Fisheries
Adaptation



Climate Field
Schools

- **Reduced** use of **resources** including water, seed, and fertilizer
- **Productivity** maintained or increased
- **Local capacity** to monitor climate **enhanced**
- Community supported **measures to strengthen resilience** such as stress tolerant varieties and water management practices **adopted**

FAO's Work – Setting norms

- FAO is generating evidence on CSA at global, regional, national, sub/national levels
- Systems developed for different climatic, agro-ecological and socio-economic conditions – and from policies to practices
- Lessons harvested at different levels are being shared in various normative tools and products and policy and field programs
- Research and piloting CSA involves collaboration with national and international research institutions and development partners

FAO Guidance - CSA

- **CSA Sourcebook** – Module based guide covering all aspects of CSA implementation
- **Planning & Implementing CSA** – Guidance for small scale agriculture
- **Integrating gender** – Guidance for CSA practitioners
- **Costs & Benefits** – Assessments of CSA practices in Africa, Asia and Latin America
- **Best Practices** – CSA case studies from around the world
- **Media** – Videos, Webinars, Discussion Groups

<http://www.fao.org/climate-smart-agriculture/en/>

FAO's Work - Developing tools

- Solutions to challenges of monitoring and verifying the GHG emission reductions and other benefits
- FAO develops methods and tool for more and localized data on:
 - Potential impacts of climate change
 - GHG emissions from agriculture and related mitigation potential

Selected FAO Tools - Climate Change

- **Ex-ACT** – Prepare project-based GHG assessment for agriculture & land-use
- **GLEAM-I** – Develop livestock GHG assessments & inventories
- **OpenForis** – Prepare high resolution land-use accounts & monitoring systems with free and open-source software
- **MOSAICC** – Prepare agriculture climate change impact assessments
- **ASIS** – Prepare assessments of agriculture systems under stress

<http://www.fao.org/climate-change/en/>

Country Experiences

- Key vulnerabilities/risks for agriculture and fisheries sectors
- Experiences and success stories with sector-specific planned adaptation measures
- Perspectives on how integrating agriculture into the NAP will enhance progress toward national adaptation priorities



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Integrating Agriculture & Fisheries into the NAP

Supplementary Guidelines for Addressing
Agriculture, Forestry and Fisheries in National
Adaptation Plans

Beau Damen & Claudia Garcia

FAO Regional Office for Asia and the Pacific and FAO NAP-Ag Team

NAP-Ag Guidelines

Supplementary Guidelines for Addressing Agriculture, Forestry and Fisheries in National Adaptation Plans



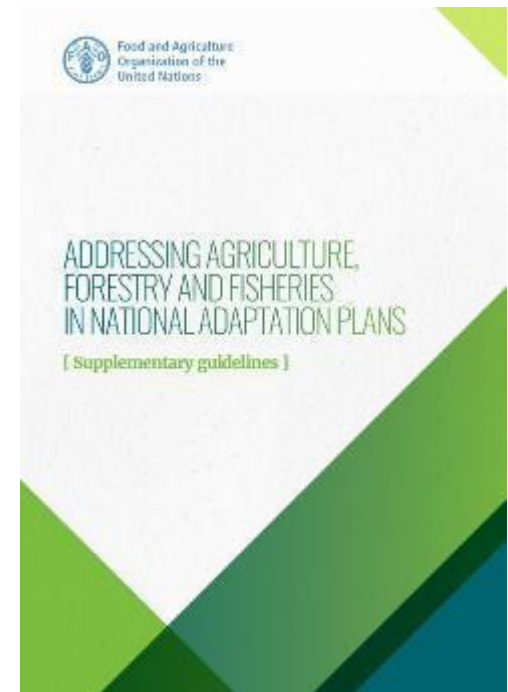
Highlight the agriculture sector-specific aspects in the process to formulate and implement NAPs



Mainstream adaptation in agriculture sector policies, plans and programmes



Support countries' efforts to reduce the agriculture sectors vulnerability to the impacts of climate change



UNFCCC NAP Technical Guidelines (2012)

A

- Lay the Groundwork and Address the Gaps

B

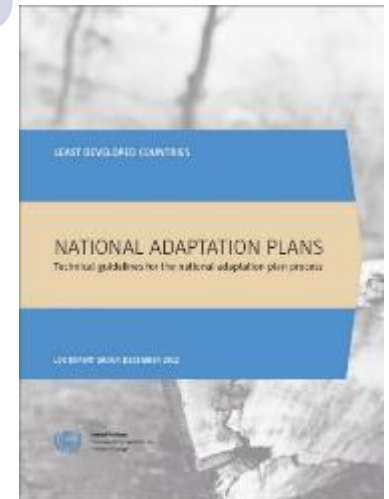
- Preparatory Elements

C

- Develop Implementation Strategies

D

- Monitoring, Reporting and Review of the process



Target groups

1

Non-Ag Specialists

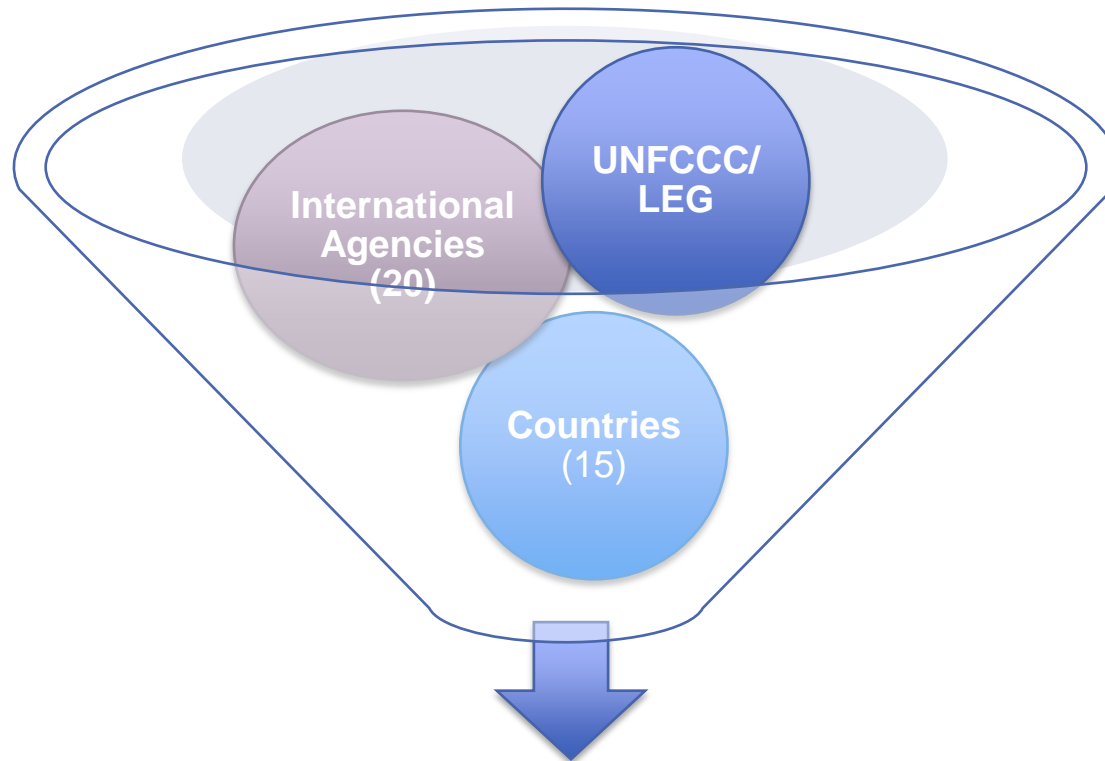
National planners
and decision
makers working on
climate change

2

Ag Specialists

Authorities and
experts of the
agriculture
sectors

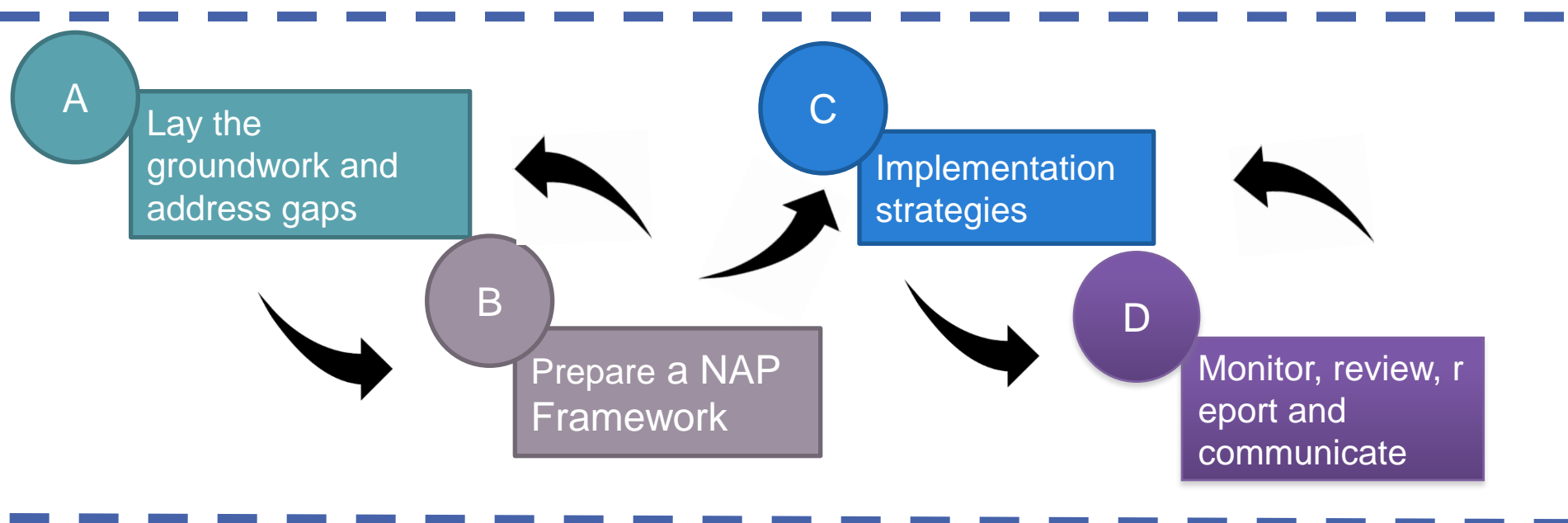
Public Peer Review



NAP – Ag Guidelines

FAO Technical Divisions

Overview



NAP-Ag Guidelines

A

Lay the groundwork and address gaps

Ensure and facilitate the appropriate involvement of relevant stakeholders from the various agriculture sectors in the process to formulate and implement NAPs

1. Initiating and launching

- Has the process to formulate and implement NAP started at the national level?
- Key Ag sectors aware of the process?
- What are Ag sector challenges?

2. Stocktaking

- What are existing key strategies links to climate change and the Ag sectors?
- Who are the stakeholders in climate change and Ag issues?

3. Addressing gaps and weaknesses

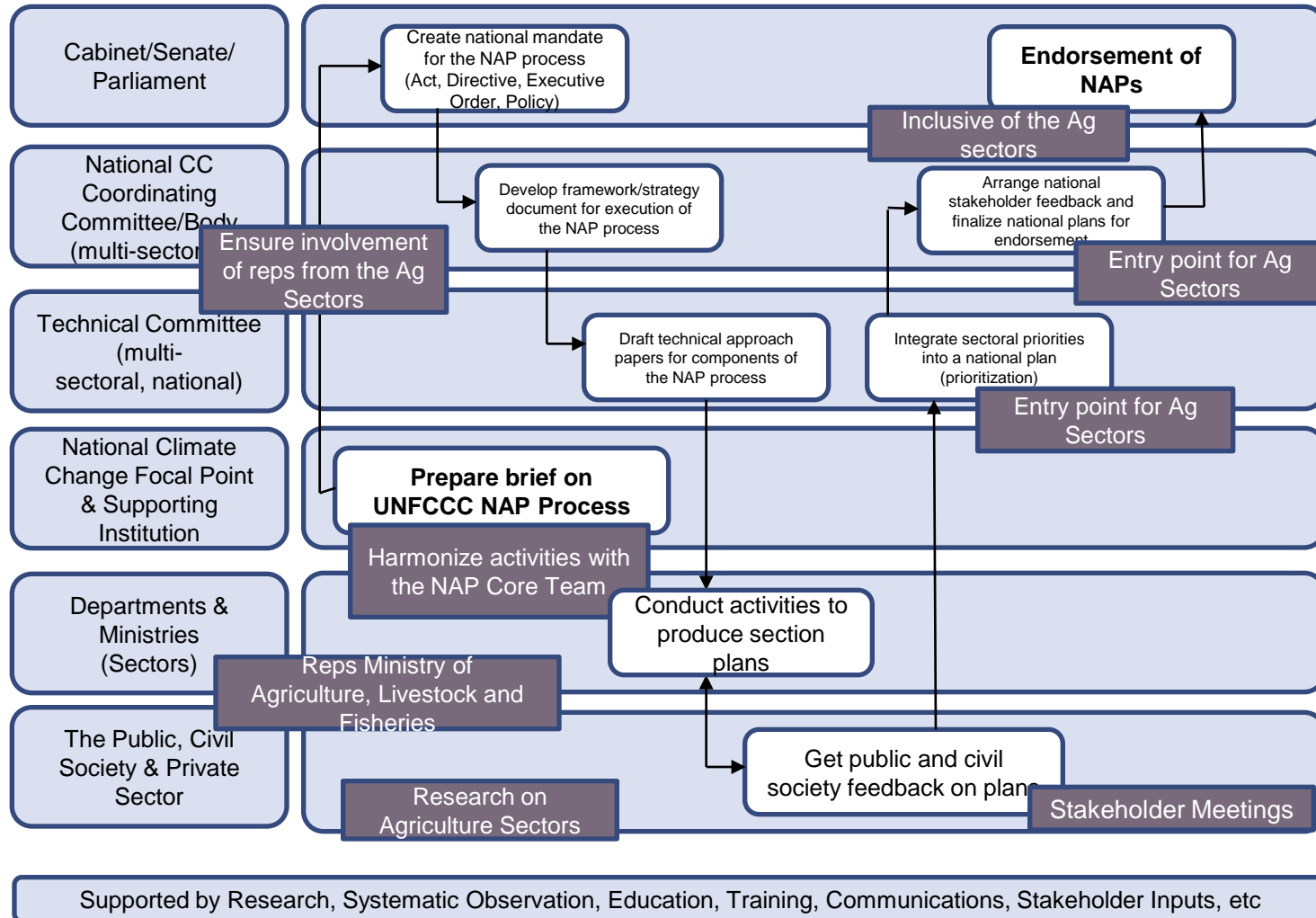
- Existing plans and resources to address capacity gaps in the NAP-Ag planning
- What coordination mechanisms are needed?

4. Linking adaptation and development

- What are the development goals in the Ag sectors?
- How to best integrate adaptation in Ag development?

NAP-Ag Guidelines

Process flow for addressing Ag



NAP-Ag Guidelines

B

Prepare a NAP Framework

Analysis of climate change scenarios, vulnerabilities and risks in the agriculture sectors for identifying, selecting and prioritizing medium- to long-term adaptation options

1. Climate scenarios

- Is climate information available and accessible?
- What are the climate scenarios for the country and the regions?

2. Impacts and vulnerabilities

- Which Ag sectors and systems are amongst the most exposed?
- What are the adaptation options?
- What is currently in place?

3. Adaptation Options

- How are adaptation options ranked and prioritized? By whom?
- Are food security, nutrition and poverty reduction considered?

4. Compiling and communicating priorities

- Identify top adaptation priority options in the Ag sectors?
- How can this be communicated to the stakeholders?, e.g. ministries and government actions engaged in NAP planning

5. Reviewing integration

- Is climate change integrated in the planning and budgeting of the agriculture sectors?
- Opportunities and barriers to do so? How to address?

NAP-Ag Guidelines

C

Implementation strategies

Ensuring the agriculture sectors' adaptation priorities are prioritized in the NAP.

1. Addressing agriculture in NAP

- Are Ag adaptation priorities well reflected in the NAP?
- What are lessons learned from ongoing programmes?

2. Planning implementation

- What are potential approaches for implementing adaptation?
- What are opportunities for financing for adaptation?

3. Developing implementation

- Is there a capacity development programme to support implementation?

4. Promoting coordination and collaboration

- Are all relevant ministries and other stakeholders engaged?
- Is there alignment with global conventions and agreements? – e.g. Paris Agreement and SDGs

NAP-Ag Guidelines

D

Monitor, review, report and communicate

Build effective monitoring and review systems to assess – progress, effectiveness and gaps in integrating Ag in NAPs

1. Prepare for monitoring

- What are key indicators for monitoring the areas?
- Is there an existing M&E and/or management information system (MIS) in the Ag sectors?

2. Monitoring the planning

- Are the Ag sectors' concerns and needs included and prioritized in the NAPs?

3. Monitoring the implementation

- Is there a review and revision process for the NAP?
- Lessons learned from successes and challenges?

4. Disseminating information

- How to ensure experiences and information are shared with relevant stakeholders?
- What are the mechanisms in place for learning across borders? e.g. South-South communication

Take away messages

- Agriculture and fisheries sectors highly vulnerable to climate change
- Already a range of adaptation measures are being rolled out to strengthen resilience of farmers and fisherfolk
- Integrating these sectors into existing national adaptation plans and processes will be crucial for ensuring that sector adaptation actions are:
 - Consistent with national priorities
 - Are able to find necessary technical and budgetary support
- The NAP-Ag supplement for the LEG NAP Guidelines provides comprehensive guidance for how to go about this process of integration

Moderated Discussion

Financing adaptation priorities for agriculture and fisheries sectors

Moderator

Rohini Kohli

United Nations Development Programme

Overarching Question

How can Ministries responsible for Agriculture, Environment, Planning and Finance work together under the NAP and with other stakeholders to leverage climate and other finance sources to strengthen the resilience of farmers, fisher folk and foresters?

Questions

1. What are the opportunities for ministries of environment and agriculture to collaborate? How are they doing this in practice? Mechanisms in place? Data sharing? Planning frameworks.
2. How can this collaboration be improved? With respect to coordination, data sharing and planning?
3. How can a greater share of climate finance both domestic and international be mobilized for agricultural concerns?



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Thank You

For more information: www.fao.org/climatechange

Questions/Comments? FAO-NAPs@fao.org