Committee Introductory Web Meeting Series:

Agriculture Committee
April 7, 2021

The meeting will start soon.

Secretariat: ipam@aaainitiative.org || http://www.adaptationmetrics.org/
IPAM Committee Introductory Web Meetings

Guidelines for your participation in this web meeting:

1. You have been automatically muted upon entering the session.

2. We kindly ask you not to unmute yourself until you are given the floor.

3. Videos are all turned off except for the person who is speaking, to save bandwidth. You will be allowed to turn on your video, if you wish, when you are speaking.

4. Please insert your (short) affiliation together with your name (go to: participants>more>rename).

5. (Brief) Q&As follow each presentation

6. To take part in the discussion, please raise your hand (go to: participants>more>raise hand).

7. You can also use the chat box to type your questions that will be answered during the final discussion.

Thank you for agreeing to these “rules of the game”
Agriculture Committee Introductory Meeting

Riad BALAGHI
Chair of Agriculture Committee
Director of Projects, the AAA Initiative Foundation
Agriculture Committee: ipamagriculture@aaainitiative.org
Objectives of this meeting

1. Present IPAM vision and structure
2. Present objectives of AMME work program
3. Discuss state of the art on agriculture adaptation indicators and metrics
4. Develop a strategy for the Agriculture Committee
1. Introduction to IPAM
2. Adaptation Metrics Mapping and Evaluation (AMME)
   • Work Program
3. Metrics for agriculture adaptation: state of the art and study cases
   • **FAO:** Selected countries experience on identifying indicators for the national adaptation M&E systems in the Agriculture Sectors
   • **CGIAR:** Measuring adaptation progress across scales and timeframes
4. IPAM Agriculture Committee
   • Plans and why to join
5. Next Steps
   • Ongoing activities and meetings

**Q&As (live discussion)**
1. IPAM
Where IPAM comes from?

• **Origins:**
  • 3 conferences on adaptation metrics (2016-2017-2018):
    ✓ The first one organised by the Moroccan COP22 Presidency: resilience, SDGs and sectoral
    ✓ 2017 and 2018 discussed Agriculture, Water and Cities sectors
  
  • 2019 Workshop to create an International Platform on Adaptation Metrics
    ✓ **Objective**: dedicated space to convene and focus expertise on the challenges of adaptation metrics
    ✓ The **challenge** is to find appropriate measurement units that are sufficiently simple, practical, usable and effective and that reflect specifically the progress in adapting to climate change as well as facilitate learning in the context of actionable monitoring and evaluation systems.
  
  • IPAM was launched on **May 22, 2020 by 5 founding institutions**

• Website: adaptationmetrics.org
IPAM Today

Period of recruitment, program development and fund-raising:

• Governed by Steering Committee of founding institutions

• **Secretariat is AAA Initiative Foundation**

• Seeking members and sponsorship

• Organizing sectoral / function committees

• Participating in variety of adaptation and resilience initiatives / collaborations

• Developing Work Program (AMME)

After this interim period, IPAM will reconstitute with refined legal and governance framework
IPAM’s Current Committees (others to come)

Agriculture
- Riad Balaghi
  ipamagriculture@aaainitiative.org

Cities
- Marta Olazabal
  ipamcities@aaainitiative.org

Water
- Driss Ouazar
  ipamwater@aaainitiative.org

Techniques and Tools
- Karl Schultz
  ipamtools@aaainitiative.org
2. Adaptation Metrics Mapping and Evaluation (AMME) work program
AMME Objectives:

To generate and share knowledge that

- Supports practitioners, funders, policymakers and research community
- Builds on existing and emerging adaptation metrics.

Program Approach:

- Strong “user-need” approach: informs evaluation framework
- Projects / initiatives defined / led (mainly) by committees
- Modular framework: Projects / initiatives may be broken down to meet specific purposes (e.g. funder/user priorities) within a coherent, harmonized approach.
Proposed AMME phases

Phase 1: Mapping / Evaluating
- Definitions and frameworks
- User purposes/standards
- Survey and evaluate metrics
- Define tools and techniques required for metrics creation and use

- Know the user and the needs landscape

Phase 2 - Creation of an open source platform:
- Geographic database for data collection from ongoing initiatives / projects
- Metrics generation and use from data to modelling
- Capacity building, knowledge and metrics sharing

- Strong interactive, sharing approach
3. Adaptation metrics for Agriculture
Agriculture is at the heart of SDGs

Agriculture is a multidimensional concept including ecosystem and biodiversity management, food security, living environment, social integration, economic development, etc…
Agriculture is a key topic of adaptation to climate change

- According to an FAO analysis (2016), 98 percent of the countries (131 out of 134) that include priority areas for adaptation and/or adaptation actions mention the agriculture sectors.

- There are hundreds of specialized research centers and dedicated think tanks committed to adaptative agriculture around the world.

- The Koronivia Joint Work on Agriculture is a landmark decision recognizing the role of agriculture in tackling climate change. Decision 4/CP.23 requests the SBSTA and the SBI to jointly address issues related to agriculture, taking into consideration the vulnerabilities of agriculture to climate change and approaches to addressing food security.
Metrics are needed for M&E systems: How can we standardize agriculture adaptation metrics?

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
<th>Associated articles in the Paris Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aggregable</td>
<td>Does the measure reflect a consistent definition of adaptation that is comparable at the national level, and is available for a comprehensive number of countries globally such that data could be systematically aggregated (qualitatively or quantitatively)?</td>
<td>Article 14 focus on collective progress and Article 7 inclusion of overall progress. To some extent Article 7’s consideration of adaptation recognition.</td>
</tr>
<tr>
<td>2. Transparent</td>
<td>Are definitions, assumptions, and methods transparent and consistent between countries?</td>
<td>Article 13 requirement for a transparency framework to inform the global stocktake.</td>
</tr>
<tr>
<td>3. Longitudinal</td>
<td>Can the measure be tracked over time to monitor and evaluate progress?</td>
<td>Article 7 and 14’s focus on progress implies tracking over time.</td>
</tr>
<tr>
<td>4. Feasible</td>
<td>For global synthesis/aggregation of national assessments submitted to UNFCCC. Does the measure avoid placing undue additional reporting burden on countries? For global tracking of adaptation using publically available data. Is the measure reasonably available or can it be collected for all countries?</td>
<td>Implicit.</td>
</tr>
<tr>
<td>5. Coherent</td>
<td>Does the measure reflect a concept or construct that is coherent with a general understanding of what constitutes meaningful adaptation? Are assumptions underpinning the use of proxies empirically validated or theoretically sound?</td>
<td>Implicit in the Paris Agreement, particularly Articles 7, 13, and 14.</td>
</tr>
<tr>
<td>6. Sensitive to national context</td>
<td>Is the measure sensitive to diverse national contexts (for example, different political, economic, and socio-cultural priorities and resources)? Does the measure avoid unjustified, poorly evidenced, or generalized assumptions — implicit or explicit — regarding what is ‘good’, ‘appropriate’, or ‘sufficient’ adaptation?</td>
<td>Implicit but unspecified; degree of desired normativity unresolved.</td>
</tr>
</tbody>
</table>

Currently no agreed-upon methods, indicators, metrics or frameworks designed for assessing progress towards the global goal on adaptation.

Adaptation Gap Report 2017 & 2020, UNEP
Monitoring & Evaluation are needed for assessing adaptation progress

“At the present time, we cannot assess the adequacy and effectiveness of adaptation planning as there is no consensus around definitions for and approaches to assessing these aspects.”

Effectiveness of adaptation planning:
- comprehensiveness,
- inclusiveness,
- implementability,
- integration,
- monitoring and evaluation

Adaptation Gap Report 2020, UNEP
Steps toward coherent M&E systems

1. **CLAIRY PURPOSES OF M&E**
   - Clarify the key uses and values of M&E data for different stakeholders

2. **DETERMINE INFORMATION NEEDS**
   - List stakeholders’ priority information needs and indicators in existing M&E systems

3. **PARTICIPATORY ALIGNMENT**
   - Work with stakeholders to select indicators that meet priority information needs and M&E data for different stakeholders

4. **DATA SYSTEMS ANALYSIS**
   - Assess existing data collection and analysis systems for opportunities to build on existing data systems

5. **PROTOCOL DEVELOPMENT**
   - Create clear data collection protocols

6. **INTEGRATED DATA SYSTEM**
   - Develop integrated systems for flow of information

7. **CONFIRM ROLES**
   - Assign roles and responsibilities for data collection and reporting

8. **CAPACITY NEEDS ASSESSMENT**
   - Conduct a thorough evaluation of human and institutional capacities

9. **STRENGTHEN CAPACITY**
   - Conduct training courses at multiple levels for M&E staff

10. **NATIONAL FINANCE**
    - Integrate M&E across sectoral budgets to access national finance and budgets of donor-supported sector-wide approaches

“M&E outputs developed including identifying users and their needs, complementary systems, potential indicators, institutional alignments for implementation, and an assessment of the capacity of implementing partners lay the foundation to create a robust M&E system” (From Climate-Smart Agriculture Investment Plan Development Guide: From Concept to Action, AAA Initiative, 2019)

4. Study cases of developed metrics for agricultural systems
Case study 1 - FAO:

Selected countries experience on identifying indicators for the national adaptation M&E systems in the Agriculture Sectors.
Selected countries experience on identifying indicators for the national adaptation M&E systems in the Agriculture Sectors

Elisa Distefano
ENRM and Climate Change Adaptation Specialist
FAO, Office of Climate Change, Biodiversity and Environment

April 7th, 2021
Contact: elisa.distefano@fao.org
Colombia: M&E framework for the Integral Management Plan of Climate Change for the Agricultural sector

**Indicators on hazards, sensitivity, adaptative capacity for these sectors**

- Food Security
  - Crops
  - Forestry
  - Aquaculture and fisheries
  - Livestock

- Water

- Biodiversity

Risk and Vulnerability Analysis of the Agricultural Sector in Colombia for 18 representative value chains. Information for each municipality (1122) and generation of 66 indicators.
Guatemala Monitoring, Evaluation and Reporting System for the agriculture, livestock and food security sectors of the PANCC

<table>
<thead>
<tr>
<th>System</th>
<th>Number of indicators</th>
<th>Example of themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate variability</td>
<td>2</td>
<td>Rainfall</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>31</td>
<td>Production of goods and services, Demographics</td>
</tr>
<tr>
<td>Risks and threats</td>
<td>12</td>
<td>Deforestation and forest degradation, Ecosystem disruption</td>
</tr>
<tr>
<td>Food security and nutrition</td>
<td>37</td>
<td>Access to food, Food insecurity</td>
</tr>
<tr>
<td>Adaptation practices</td>
<td>20</td>
<td>Forestry and agroforestry, Irrigation projects</td>
</tr>
</tbody>
</table>
Uruguay M&E system for the NAP for the Agriculture Sector

32 INDICATORS

4 Dimensions

Production systems
Ecosystems and natural resources
Rural Livelihoods
Institutional Capacities
## Kenya CSA Strategy and Implementation Framework and the use of existing data sources

<table>
<thead>
<tr>
<th>Data source</th>
<th>Relevant sector</th>
<th>Description of data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya Meteorological Department</strong></td>
<td>All</td>
<td><strong>-Climatic data</strong>&lt;br&gt;-Agro-meteorological stations collect data on climate</td>
</tr>
<tr>
<td></td>
<td>Agriculture</td>
<td><strong>-Data on food, horticultural and industrial crops, animal production, animal health, soil fertility, vegetation, agroforestry, and irrigation.</strong></td>
</tr>
<tr>
<td><strong>Kenya Agricultural Research Institute</strong></td>
<td>Agriculture</td>
<td><strong>-Data on food, horticultural and industrial crops, animal production, animal health, soil fertility, vegetation, agroforestry, and irrigation.</strong></td>
</tr>
<tr>
<td></td>
<td>Livestock</td>
<td><strong>-Data on food, horticultural and industrial crops, animal production, animal health, soil fertility, vegetation, agroforestry, and irrigation.</strong></td>
</tr>
<tr>
<td><strong>Department of Resource Surveys &amp; Remote Sensing</strong></td>
<td>Forestry</td>
<td>Data on livestock/wildlife numbers and distribution, vegetation cover, forests, species composition, biofuel, biomass, crops, land degradation, and human settlements.</td>
</tr>
<tr>
<td></td>
<td>Wildlife</td>
<td>Data on livestock/wildlife numbers and distribution, vegetation cover, forests, species composition, biofuel, biomass, crops, land degradation, and human settlements.</td>
</tr>
<tr>
<td></td>
<td>Livestock</td>
<td>Data on livestock/wildlife numbers and distribution, vegetation cover, forests, species composition, biofuel, biomass, crops, land degradation, and human settlements.</td>
</tr>
<tr>
<td><strong>Water Resources Management Authority</strong></td>
<td>Water</td>
<td>Data on flow volumes at river gauging stations; from hydro meteorological weather stations.</td>
</tr>
<tr>
<td><strong>Kenya Forest Service</strong></td>
<td>Forestry</td>
<td>National-level statistics on forestry, forest cover, land use change, timber and fuelwood consumption.</td>
</tr>
<tr>
<td><strong>National Environment Management Authority</strong></td>
<td>Water</td>
<td>Data on water quality.</td>
</tr>
<tr>
<td><strong>Kenya National Bureau of Statistics</strong></td>
<td>All</td>
<td>Socio-economic data.</td>
</tr>
<tr>
<td><strong>Monitoring and Evaluation Directorate</strong></td>
<td>All</td>
<td>Process-based indicators on expenditure on adaptation and related activities.</td>
</tr>
</tbody>
</table>
Uganda Performance M&E framework for NAP for Agriculture

<table>
<thead>
<tr>
<th>Components and performance dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component 1:</strong> Crop Production</td>
</tr>
<tr>
<td><strong>Component 2:</strong> Livestock Development</td>
</tr>
<tr>
<td><strong>Component 3:</strong> Fisheries and Aquaculture</td>
</tr>
<tr>
<td><strong>Component 4:</strong> Climate Information, Early Warning and Disaster Preparedness Systems</td>
</tr>
<tr>
<td><strong>Component 5:</strong> Land Use Land Use change and Forestry (LULUCF)</td>
</tr>
<tr>
<td><strong>Component 6:</strong> Research for climate resilient agricultural development</td>
</tr>
<tr>
<td><strong>Component 7:</strong> Knowledge Management and Partnerships for climate action</td>
</tr>
<tr>
<td><strong>Component 8:</strong> Gendered Approach to climate change adaptation</td>
</tr>
</tbody>
</table>
Some points for reflection...

Selection of indicators should be performed:

1. Considering what is already tracked in existing systems and by key relevant institutions e.g. Guatemala SIPSE, Colombia SISCLIMA

2. Directly linking into a set of national, sectoral goals and targets (facilitating global reporting of results)

3. Building on a solid theoretical background, e.g. results of the vulnerability and risk assessment

4. The number of indicators varied a lot between countries and there is no one answer as to what is an appropriate or manageable number

5. There can be a gap between what has been designed and what is operationally viable
Case study 2 - CGIAR:

Measuring adaptation progress across scales and time frames
Measuring adaptation progress across scales and time frames

Godefroy Grosjean, G.Grosjean@cgiar.org
Andreea Nowak, A.Nowak@cgiar.org

IPAM Agriculture Committee Meeting
7 April 2021
About us

CGIAR

» **Cutting-edge Research Centers**
  » CGIAR global network combines cutting-edge research, knowledge and assets that can respond to emerging challenges across the **food-water-energy nexus**.

» **Collaborative Partnerships**
  » Unequalled partnership network that includes public and private investors, corporates, government bodies, academia, global policy bodies and NGOs.

» **Country Presence**
  » Country presence in **+70 countries** with a deep knowledge of customs, values and market operations in developing countries.

» **+8000 Scientists and Researchers**
  » +8000 scientists and researchers contributing to world class research. CCAFS brings together some of the best researchers globally in **food systems, water, energy, climate, environmental, and social sciences**.

» **Annual Operations and Research Funding**
  » **USD 1 billion** in Annual Operations and Research Funding
AICCRA
World Bank & CGIAR project
USD 60 MIO/3 years

Where

Africa-wide

Sub-regions

Anchor countries

Who

Thematic leads
Continental partner orgs
CG centres

Sub-regional leads
Sub-regional partner orgs

Lead CG centres
Other CG centres
National partner orgs

What

Innovative partnerships
Capacity development
Investments, policies

Supporting uptake

Partnerships for delivery

Knowledge generation & sharing

CIS & CSA Packages
Gender-sensitive plans, priorities

Engagement platforms

1 Components

2 Outputs

Synthesise learnings
Scale out

AICCRA
Knowledge generation & sharing

World Bank & CGIAR project
USD 60 MIO/3 years

1 Inputs

Producing

Processing

Retailing

Consuming
Robust investment planning requires a combination of results-based and outcome-driven approaches to M&E.

Design of theories of change and indicator frameworks for short-, medium- and long-term investment planning in climate-smart agriculture in Mali, Cote-d'Ivoire, Jordan, Bangladesh and others.

Measuring adaptation output, outcome and impacts of for a selected investments (based on Mali CSA Investment Plan)

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>SHORT</th>
<th>MEDIUM</th>
<th>LONG-TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>Outputs (results)</td>
<td>Outcomes</td>
<td>Impacts</td>
</tr>
<tr>
<td>Extension systems</td>
<td>Ratio of advisory officer to producers;</td>
<td>Improved capacity of advisory officers to deliver relevant, timely information to farmers</td>
<td>Improved coping strategy index (weighted score)</td>
</tr>
<tr>
<td></td>
<td>Frequency of access to CSA information by producers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agroclimatic information systems</td>
<td>Number of weather stations installed and maintained;</td>
<td>Improved effectiveness of services in reducing exposure to climate risks (perceptions)</td>
<td>Improved adaptive capacity index (composite score)</td>
</tr>
<tr>
<td></td>
<td>Number of producers using info services;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop system integration</td>
<td>Number of new varieties on market;</td>
<td>Improved R&amp;D systems for developing climate-smart value chains</td>
<td>Improved farm resilience to food insecurity (Resilience capacity index)</td>
</tr>
<tr>
<td></td>
<td>Number of users of new varieties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restoring degraded land</td>
<td>Area (ha) and proportion (%) of degraded land restored</td>
<td>Improved national capacity (extension, research, producers) to restore degraded lands</td>
<td></td>
</tr>
</tbody>
</table>

Many M&E frameworks and systems are available, and they collect a wealth of data on adaptation.

Mapping information needs, available information sources and opportunities to integrate data systems for measuring and reporting (MR) on CSA at national level (Mali, Tanzania, Zambia and Zimbabwe).

In Tanzania, various M&E systems collect information on similar indicators for different reporting purposes (national, regional, international and project level).

Review of 50+ NDCs and NAPs in Africa reveals opportunities and gaps for the Global Stocktake

Key questions:

• How are countries tracking their adaptation commitments under the UNFCCC (NDCs, NAPs)? (sectors, levels of ambitions, resilience dimensions, topics)

• How far are countries in the process of setting up adaptation M&E systems? (metrics, quantified targets and timeframes, data sources, institutional roles)

• What are common and unique adaptation indicators across the continent? (best practices, lessons, indicator matrix)

Selection of key findings (work in progress)

Less than 50% of the NDCs & NAPs submitted have adaptation indicators

A predominant emphasis on measuring short & medium-term changes (Share of indicators)

High interest in boosting adaptive capacity (Share of indicators)

Nowak AC, Rosenstock TS. 2020. Foundations for common approaches to measure global adaptation actions in the agriculture sector. CCAFS InfoNote. Wageningen: CCAFS
Thank you!
What should be top action tracks for agriculture?

1. **Assess gaps in terms of adaptation knowledge**, data and metrics, from practitioners to funders;
2. **Harmonize and inter-connect existing metrics**, from project activities to funders;
3. **Develop composite metrics** to improve the understanding of adaptation, for comparative assessment across contexts;
4. **Develop an operational adaptation M&E system**, to inform adaptation progress (NAPs, SDGs, NDCs, etc.)
5. **Develop a geodatabase collaborative platform** for mapping existing adaptation metrics worldwide;
6. **Develop capacity building materials** for practitioners;
7. **Create interconnections** between research centres and practitioners;
8. Others (please suggest during discussion)
IPAM Agriculture Committee
Develop pragmatic, comparable, standardized and cost-efficient metrics and methodologies to track performance of adaptation projects in their human, agri-environmental, and financial dimensions, in order to help:

• Estimate the technology and knowledge gap;
• Estimate the finance gap (by governments, donors, banks, development agencies and private sector);
• Allocate resources, and to record how projects are converted into outcomes and impacts to better adapt to climate change, in the framework of countries’ agriculture strategies, NDCs and NAPs.
IPAM Agriculture Committee: Some ideas

- **Map** existing practices / users / needs for measuring *agriculture* adaptation
- **Evaluation** of the usability of metrics and frameworks for adaptation measurement
- **Co-creation** / conception of a coherent and aggregable set of metrics
  - Mapping and evaluation frameworks
  - Adaptation metrics
- **Pilot** ideas and concepts of adaptation metrics
- **Share** of experiences of research and practice
IPAM Agriculture Committee activities

- **Modes of collaboration:**
  - Advising on IPAM Agriculture work and plans.
  - Supporting the coordination of the Committee.
  - Collaborating and producing work and conceiving ideas.
  - Participating in outreach activities and engaging with stakeholders.
  - Sharing information and networking.
  - Others?

- **Activities:**
  - Committee meetings and topic-specific seminars
  - Projects/initiatives: design, resource, work together
  - Outwards facing engagements
    - To help others know IPAM or to disseminate IPAM’s work
    - To raise awareness on the challenges of building and using metrics for agriculture
    - Training/meeting user communities, etc.
  - Interacting through information sharing platforms
Agriculture committee first work meeting

- Scheduled in May
- Collect feedback / ideas on:
  - Agriculture Committee purpose and plans
  - Governance and working groups
    - Meeting frequency/themes
    - Committee “meeting” versus Showcasing/Work Collaboration
    - Composition and specific sub-group activities
    - Platform for communications and networking
- Start working on a collective positioning paper
POLL 2 (single choice)

Would you be interested to contribute to IPAM Agriculture / AMME development:

1. Yes, I would like to be an associate member and part of the agriculture committee
2. Yes, I am interested to be kept informed about progress and invited to specific discussions
3. I’m solely interested in sharing data, documents and any kind of resources through IPAM
4. I’m specifically interested in contributing to AMME
5. No, thank you
5. Next Steps

The International Platform on Adaptation Metrics

Forging common metrics to monitor, evaluate, and foster adaptation to climate change
Ongoing activities within IPAM Steering Committee

- Recruitment of members and supporters
- Development of the AMME work program for agriculture
- Participation in diverse initiatives (R2R, ARA, ..)
- Organisation / contribution to events related to adaptation metrics (Adaptation Futures, COP26, WASP...)

www.adaptationmetrics.org
Next meetings for IPAM members

1. **AMME** work program feedback *(mid-late May)*
2. **IPAM** committee first work meetings *(Late April or May)*
Join IPAM and its committees to participate

Membership is required to participate in committees and access information platform

- **Institutional Members** (voting members in Steering Committee, contact us).
- **Associate Members** (to be associated as an individual, and involved in topic-oriented committees, sign a charter).
- **Sponsors** (don’t need but can be involved in committees or events, contact us).
- Anyone interested can sign up to the **mailing list**

CONTACT: ipam@aaainitiative.org

MORE INFO: http://www.adaptationmetrics.org/join-ipam
POLL 3 (single choice)

Would you be interested in taking up a leading role in IPAM Agriculture Committee?

1. Yes, I could co-chair the committee and conceive and organize sessions

2. Yes, I would be interested in leading a working group (to be proposed in final discussion)

3. No, thank you
Discussion

Q&As

Please, raise your hand.
Thank you very much for your participation