2ND ANNUAL REGIONAL WORKSHOP ON
Conservation Agriculture and Sustainable Intensification
28-29 September 2021
Virtual Webinar | 14:00-17:00 GMT+7
Session 5: Support by Development Partner

**Facilitator**

Dr. Florent Tivet, Researcher of CIRAD and Technical Advisor of Department of Agricultural Land Resources Management (DALRM)

**Speakers**

Mr. Muong Sideth, Unit Head of Agriculture, développement rural, infrastructure, environment
Agence Française De Development
Support by Development Partners on Enabling CA Environment

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Agence Francaise De Development
1998-2030: Support to Smallholders Rubber Development (£1 M)

- **Phase 1:**
  - PADAC (Support to agricultural development project) £2.5 M
  - CANSEA (Conservation Agriculture Network in Southeast Asia)

- **Phase 2:**
  - Stung Chinit R&D center

- **Phase 3:**
  - Agro-ecological transition ACTAE (£2.5 M)

- Rubber budwood garden: £38 K

- **FORSEA Natural Rubber (£1.5 M):**

- **African Development Fund's doctrine on agroecology**

**15 years evaluation of AFD's support to agroecology**

(i) A courageous and ambitious paradigm shift,
(ii) But a questionable approach and mechanism,
(iii) Limited but promising future agro-ecological developments and initiatives

**ASSET Agroecology & Safe Food Systems Transitions (£11.54 M):**

**WAT4CAM (Water resource and agro-ecological transition): £200 M**

**Phase 1**

**Phase 2-4**

**Agricultural competitiveness ACSEP (US$ 110 M AFD/ADB):**

**Rainfed agriculture (RAD4CAM) £200 M**

**Phase 2-4**
Coffee Break

4:15 PM – 4:20PM
(5 mins)
Consultative Discussion on the Workshop

Dr. SENG Vang (Ph.D.) Director of Department of Agricultural Land Resources Management (DALRM). Ministry of Agriculture, Forestry and Fisheries (MAFF), Cambodia
Key learnings:

- Remarkable progress and clear future directions (Scaling model, appropriate implements, training materials, and institutional and policies)
- We have spent decades, great deals of efforts and resources in reaching toward CA/SI.
- Large-scale adoption of CA remains challenging. Thus, more efforts, time, resources, etc. are required to promote the large-scale adoption of CA/SI.
Cambodia

• Provided a full picture of country’s progress in CA/SI implementation and showcase some success stories since 2004

• Presented a comprehensive long-term strategies, frameworks and action plans in research, extension and uptake of CA/SI

• Presented innovative platform and model for scaling up & out of CASI (CASIC, Metkaksekor)

• Demonstrate positive trends in CA support and adoption
China

- Provided an overall picture of research, development and promotion of CA
- Very long history of research, development, and promotion of CA since 1992
- CA is well-known and acknowledged at all levels
- Advanced development in CA Tech, mechanisation, and equipment
- A strong upward trend in CA adoption
India

- Provided three main focuses to promote CASI:
  - Laser precision land leveling
  - No-till, direct seeded rice, residue management raised bed planting
  - Precision water management in CA (Micro irrigation and automation)

- Impressed achievements with innovative seeders exported to over 40 countries and CA training materials development
Session 2: Addressing technical challenges related to CA/SI broad-scale adoption

Key learnings:

• On-going research, refinement and development of specialized equipment and machinery for local specifics (small hodlers), and plant materials (Cover crops)
• Developing markets for CA farm inputs (seeds, bio-products, etc.) and machinery development and service contractors
• Policy support and extension of CA/SI
Cambodia: Plant Material

• Long term use of cover crops in Cambodia (flow of projects from ACIAR, IRRI, CIRAD, among others)

• Need of a recognition within a national portfolio to facilitate the engagement and investment of private companies and foster the dissemination nationwide

• Huge benefits from cover crops: improving soil health; weed management; gaining income from seed production; and benefits in terms of adaptation and mitigation, etc.
Nepal: Promoting Mechanization

- Challenges: Less funding for research and public sector investment, climate associated risks, mindset, small farm size, lack of specialized equipment and machinery for no-till planters

- Suggestion: a strong need for a working group to advocate CA. Working with farmers, scientists and private actors to enhance and to share information and results in order to scale-up adaptation of CA/SI
Region: Bio-Products

- Need specific regulations as living microorganisms biofertilizers are not BCA and biofertilizers are not chemicals
- Need to develop local market on biofertilizers
- Need to better inform farmers on their use of biofertilizers and BCA
- Active on-going research on this topic in Cambodia with ITC, NUBB, RUA, GDA-DALRM, CIRAD and IRD.

What about plant fortification microbes?

- BCA are biocontrol agents directly targeting the pathogen / bioaggressor

But there are others phyto-benefical microbes:
- Some plant associated microbes are known to stimulate plant growth, nutrient use efficiency and immunity.
- These can be bacteria (PGPR) or fungi (PGPF as mycorrhizal fungi or fungal endophytes as Trichoderma spp.), naturally present in the microbiome of plants.
Session 3: Managing diversity in CA/SI systems adoption

Key learnings:

• Developing policy and institutional support to bring people and actors to work together in interdisciplinary context

• Strengthening functional capacities of key national institutions and linkages among them to facilitate and promote uptake and scaling of sustainable agricultural intensification practices

• Capacity building and regional cooperation (Straw management, crop diversity)
Fascinating technical processes of converting straw into fertilizer and returning manure to the field

Agricultural machinery can provide sustainable solutions to address residue burning but local adaptation, community engagement, capacity building and regional cooperation are critical.
Vietnam: Vegetal Biodiversity

- Modes of vegetal diversification: vegetal biodiversity, associated biodiversity, and animal diversity
- Plant diversification improves natural crop protection against pests
- Need for a socio-ecological accompaniment and support during the transition period

Objectives: Promoting vegetal biodiversity in ACP

- Is biodiversity a key component for natural pest control?
- How to manage biodiversity in the field?
- What conditions are necessary to increase biodiversity in farmer fields?
Vietnam: Tree Integration

• Guiding/accompanying the existing transitions rather than pushing for entirely new systems
• Avoiding major barriers/ incompatibilities (common pests and diseases, concomitant rush for labour, distinct need for irrigation...)
• Adapting farming practices to improve resource use efficiency
Region: Innovation System

- Cambodia: Developing policy and institutional instruments to bring people and actors to work together in interdisciplinary context
- Lao: Strengthening functional capacities of key national institutions and linkages among them to facilitate and promote uptake and scaling of sustainable agricultural intensification practices
Session 4: Driving CA/SI dissemination process adoption

Key learnings:
• Capacity building of stakeholders is key for successful agroecological transition
• Deï Meas bridges financing gap and pays farmers already in the first year of transition to incentivize adoption of regenerative practices
• LICA – Lao Initiative for Conservation Agriculture
Pakistan: Laser Land Levelling

- Capacity building of stakeholders including farmers, ASPs and extension workers is key for successful technology transfer.
- Supportive government policies through establishing linkages and engagement of civil society organizations/NGOs and networks like SACAN in policy implementation, monitoring and evaluation process.
- Using SSS extension model, ASPs to emerge as small-scale agricultural/rural entrepreneurs.
Cambodia: Carbon Funding Mechanism

- Transitioning to sustainable soil management increases profits, enhances resilience and reduces GHG emissions.
- Farmers benefit an additional revenue stream for carbon sequestration and ecosystem services production.
- **Dei Meas** bridges the financing gap and pays farmers already in the first year of transition to incentivize adoption of regenerative practices.
Region: Supportive Policies

- **Lao Initiative for Conservation Agriculture and Agroecology**
  - Enabling environment: capacity building, creating awareness, educational training production, etc.
  - Coordinating and bridging all stakeholders (producers, processors, traders, advisors and consumers)
Session 5: Support by development partners on enabling CA environment

Key learnings:

• Long-term financial commitment from AFD-EU on supporting CA/SI transitions.

• Many other donors (i.e., USIAD, SDC, ACIAR, UN CSAM, UN SCAP, etc.)

• PPP framework (Public Private/Development Partners Partnership)
Session 5: Support by development partners on enabling CA environment

Highlights from AFD-EU long term commitment

- 2004: Support Bos Khnor CA/SI R4D
- 2007 – 2012: Support to agricultural development (2.5 M EUR)
- 2015 – 2019: Agroecological transition ACTAE (2.5 M EUR)
- 2020-2025: ASSET Agroecology & Safe Food Systems Transitions (11.54 M EUR)
- 2020-2025: Agricultural competitiveness ACSEP (US$110 M)
- 2021-2030: RAD4CAM (Rainfed Agriculture): (200 M EUR)
Key-Learning Remark

Ms. Melanie Blanchard
Scientific Coordinator of ASSET Project
ASEA platform coordinator
Researcher – Animal Scientist, Crop-livestock integration specialist
CIRAD, Selmet
Closing Remark

HE. Dr. Ngo Bunthan
Rector of the Royal University of Agriculture, Cambodia
And Vice Chair of CASIC Executive Board
Thank You

CASIC 2nd Annual CA & SI and Agroecology Regional Workshop

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Virtually Workshop
CAMBODIA