Workshop on policy for agroecology transition in South-East Asia

30th – 31st March 2023
Bangkok. THAILAND

Cambodia Conservation Agriculture and Sustainable Consortium (CASIC)

Presented by Dr. Chan Saruth
Chair of the CASIC Executive Board
OVERVIEW

- History of CA/SI in Cambodia
- About CASIC
- Policy dialogue
- CASIC’s partners
1

History of CA/SI in Cambodia
History of CA/SI in Cambodia

- Location: Southeast Asia
- Latitudes 10 and 15 North and longitudes 102 and 108 East.
- Total area: 181,035 km²
- Provinces: 25
- Capital city: 1 (Phnom Penh)
- Wet season: May-October (15°C-21°C)
- Dry season: November-April (25°C-35°C)
- Rainfall: 1500mm-2500mm/year
- Main crop: Rice, Sugarcane, Cassava, Maize
Illustration of water pollution by inappropriate agri-practices

- Deforestation
- Soil erosion
- Agro-input application
History of CA/SI in Cambodia – cont’d

Threaten of inappropriate cultivation practices

Map of Cambodia showing various regions and percentages.
The 3 Principles:
• No-tillage
• Cover crop/Permanent cover
• Crop rotation

THE CONSERVATION AGRICULTURE IN CAMBODIA

Soil restoration
Soil Carbon accumulation
Water infiltration & retention
Efficiency and Profit
Soil fertility changes: CT vs CA system, adjacent plots

- Disrupted soil
- Sensitivity to run-off and erosion
- Hard pan
- Limited flow of O² & water
- Limited root exploration

- Continuous flow of C
- Intense biological activity
- Improved soil structure, aggregation
- Contributing to SOC stabilization
- Large volume of soil explored by root systems

History of CA/SI in Cambodia – cont’d
• Conservation Agriculture and Sustainable Intensification (CA & SI) activities have been implemented in Cambodia since 2004 in close collaboration with CIRAD;

• Due to the lack of participation from the private sector and other stakeholders in the field of CA & SI and agroecology, its activities have not been scaled up widely;
To turn CA & SI into a commercial venture, there is a need for all market actors including; farmers, seeds/crop providers, agriculture cooperatives, tractor owners, middlemen (brokers), manufacturing workshops, training institutions, financial institutions, retailers and input suppliers etc. to come together;

Therefore, it is a need to establish the **Cambodia Conservation Agriculture Sustainable Intensification Consortium (CASIC)** in order to work together on addressing these issues in order to make CA & SI more accessible to farmers through the market actors offering the services.
2
About
CASIC
About CASIC

CASIC is a national platform for the members to create network among public sector, private sector and other organizations aiming to promote Conservation Agriculture, Sustainable Intensification (CA/SI) and Agroecological practices in Cambodia. CASIC is NOT an implementing organization.
CASIC is governed by the Ministry of Agriculture, Forestry and Fisheries (MAFF) under official decision letter No. 201.SSR.KSK issued on 21 May 2020.

CASIC is a national consortium who catalyze a wider adoption of CA SI and Agroecology innovative approaches and techniques as a platform with the aim to coordinate and support research for development; invest into knowledge management; create an enabling environment for policy dialogues and public-private partnerships; value creation; and explore market opportunities and enhance collaboration between various stakeholders in conservation agriculture, sustainable intensification, and agroecology.
A. **Steering Committee consists of:**

i. Ministry of Agriculture, Forestry and Fisheries;
ii. Ministry of Interior;
iii. Ministry of Environment;
iv. Ministry of Water Resources and Meteorology;
v. Ministry of Women Affairs; and
vi. Ministry of Education Youth and Sports.

B. **Executive Board Committee consists of:**

i. General Directorate of Agriculture;
ii. General Directorate of Animal Production and Animal Health;
iii. Department of Agriculture Land Resource Management;
iv. Department of Agriculture Engineering;
v. Department of Extension for Agriculture Forestry and Fisheries;
vi. Department of International Cooperation; and
vii. Department of Planning and Statistics.

i. Council for Agricultural and Rural Development

i. Cambodia Chamber of Commerce (Representative of private sector)

i. Royal University of Agriculture; and
ii. Cambodia Development and Research Institute.

i. Provincal Department of Agriculture, Forestry and Fisheries (9 Provinces)

i. CIRAD;
ii. Swisscontact Cambodia; and
iii. CE SAIN
R4D and intervention areas

**Siem Reab:** Vegetable production
- Sandy soils
- On-farm network (2009)
- CE SAIN Technology Park

**Preah Vihear:** Irrigated scheme – Organic rice
- Upland farming
- Demo & on-farm network (2020)

**Battambang:** Upland farming
- Mollisols
- On-farm network (2009)
- Experiment (2020)

**Battambang:** Flood plains (2009) and intensive irrigated rice (2020)
- Sandy to clayey soils
- National University of Battambang & CE SAIN Technology Park
- Experiment (2021) & On-farm network (2015)

**Kampong Thom:** Irrigated scheme
- Sandy soils
- Long-term paired-plot design (2011)
- On-farm network (2015)

**Kampong Cham:** Bos Khnor CA Station
- Technology Park (CE SAIN)
- Upland, Red Oxisol
- Long-term experiments (since 2004)
- Genetic bank (> 50 species, > 300 varieties)
Rectangular Agroecology Systematic Approach in Cambodia

Research: Centre of Excellence
A five-year strategic plan is developed. Aspiration for regional centre of Excellence.

Skills/Human Resources
InGuider (apprentice) model established. Need to integrate regenerative agriculture in the curriculum

Transition Financing (Dei Meas - Golden Soil)
A 3-year pilot is under-way. Setting up certification and verification system including carbon credit

Extension (Metkasekor)
Public-private model. Piloting is underway. Embedded in the government system.

Technologies and practices (Cover crop & machineries)
Companies in cover crop production/distribution. Companies in no-till machineries and other equipment

Formed as a government coordination mechanism
3 Policy Dialogue
Policy dialogue on CA/SI and agroecology

Challenges on CA/SI and agroecology

- Low access to equipment/appropriate technology for CA/SI (low availability and high cost);
- Low overall knowledge level and limited training opportunities on CA and SI (e.g. no curriculum available at universities);
- Limited financial incentives (no existing governmental financial support mechanisms);
- Low awareness of existing policies and market opportunities;
- Limited multi-stakeholder collaboration.

Policy recommended

- Make use of the current policy framework to support CA/SI and agroecology;
- Enable access to CA/SI and agroecology technologies for farmers;
- Improve available training/educational opportunities on CA/SI and agroecology.
CASIC’s partners
Purpose

To accelerate the transformation of food systems through agroecology, guided by the 13 principles of agroecology defined by the High Level Panel of Experts (HLPE) of the Committee on World Food Security (CFS) that are aligned with the 10 Elements of Agroecology adopted by the 197 FAO Members in December 2019.
Support implementation of country pathways for FS transformation through agroecology

- Co-creation and exchange of knowledge
- Seeking increased investments in agroecology
- Seeking political engagement and increased commitment to the agroecological transformation
45 member countries (6 from Latin America, 7 from Asia, 12 from Europe and 20 from Africa)
CASIC’s partners – cont’d

Member organizations

[Image displaying various logos of member organizations]
CASIC’s partners – cont’d

Representatives of Member States for each region

**Latin America**
Santiago Argüello Campos
Mexico

**Africa**
Amadou Oury Diallo
Senegal

**Europe**
Madeleine Kaufmann
Switzerland

**Asia**
HE Saruth Chan
Cambodia

---

**Steering Group**

**Farmer’s organisations representative**
Esther Penunia,
Asian Farmers Association

**Indigenous peoples’ organisations representative**
Monica Yator
Indigenous Partnership

**CSO’s / NGO’s representative**
Stefanie Pondini
Biovision Foundation

**Philanthropic organizations representative**
Lauren Baker
Global Alliance for the Future of Food

**UN organizations representative**
Ronnie Braithwaite
FAO

**Research organizations representative**
Fergus Sinclair
Transformative Partnership Platform on Agroecology (TPP)
For more information, please find CASIC on

www.casiccambodia.net

facebook.com/CASICCambodia
Thank you for your attention