Compendium of Climate-Resilient Agriculture Technologies & Approaches in the Philippines

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Significance of the Compendium

- Existing CRA Ts & As are available in various publications and references
Significance of the Compendium

- Aims to integrate and consolidate these Ts & As with a focus on climate change adaptation and mitigation strategies
Users of CRA Ts & As

▪ Civil Society/Farmers’ Organizations
▪ Technical Staff and Officials from Government Agencies and Private Institutions
▪ Development workers from NGOs with related work on CCAM
▪ Researchers and Scientists from Academe, National, and International Research Institutions
▪ Policymakers
What is the **compendium** all about?

This book presents agricultural technologies and approaches (Ts & As) that can enhance resilience to climate change in upland, hilly and coastal agroecological systems in the Philippines. The Ts & As are developed for sustained productivity, adaptation, and/or mitigation to climate change. This compendium also highlights the use of a tool to assess these Ts & As in terms of their effect on productivity, resilience, and contribution to GHG emissions. The Compendium enumerates seven transformative strategies, each of which allows the farmers—the end-users of climate-resilient technologies and approaches—to participate in climate- and agriculture-related discussions, improve their productivity in the farms, enhance their adaptive capacity against current and impending risks, and reduce their greenhouse gas emissions into the atmosphere.
What is the **compendium** all about?

The compendium provides overview of:

- Climate-Resilient Agriculture Ts & As in the Philippines
- Challenges in the context of climate change
- Summary of Philippine policies, strategies, programs, and plans related to CRA
- Natural and socioeconomic conditions of different agroecological systems in the Philippines
What is the **compendium** all about?

CRA Ts & As (description & methodology) applicable in various ecosystems:
- irrigated lowland
- rainfed lowland
- upland
- hilly land
- highland
- coastal

and information technology management.
What is the compendium all about?

Assessment, Prioritization & Ranking of CRA Ts & As

- Stakeholder Workshop on CRA last January 2019 at SEARCA
- Experts from different fields of agriculture, forestry, coastal and marine resources management, and information technology management
Assessment Tools of CRA Interventions

Indicator based Prioritization

CSA Intervention

- Enhance Productivity
- Climate Risk Reduction
- Emission Reduction

Indicators

Scoring

Intervention response to productivity (-10 to +10)*

Intervention response to climate risk like drought, heat wave, flood etc. (-10 to +10)*

Intake of fertilizer and water by Intervention (-10 to +10)

Technology Ranking based on Composite Indicator (Method: Multi-criteria Analysis)

Note: Likert Scaling with -ve value indicate reduction and +ve value indicates increase
Assessment Tools of CRA Interventions

Is the intervention technically, fiscally, ethically, and administratively feasible?
Assessment Tools of CRA Interventions

Adoption Barrier Assessment

- Finance Availability
- Machine Availability
- Farmers Knowledge
- Farmers Acceptance
- Labour Availability
- Reliable Water Availability
- Govt. Support Access
- Extension Service Access
- Market Access

Can the different external and internal constraints affect the level of adoption of farmers and other stakeholders?
Assessment Tools of CRA Interventions

Assessment of Key Incentive Mechanisms

- Subsidy
- Credit
- Capacity Building
- Market Linkage

Does the intervention motivate or encourage farmers and other stakeholders to adopt and replicate the CRA technologies and approaches?
Assessment of Key Implementation Players

Who are the key institutions/players in disseminating CRA Ts & As?
What is the compendium all about?

- Promotion and Dissemination Strategies of CRA Ts & As
- Transforming Philippine Agriculture Under Climate Change
Way forward:

▪ Put CRA Ts and As on the ground to provide the target clienteles with basic information on adaptation and mitigation strategies in various agroecological systems in the Philippines.

▪ We are open to collaborations with different agencies and institutions to apply these technologies and approaches in CRA-related programs/projects, planning, and policymaking.
Dedication to
Dr. Arturo A. Gomez

▪ One of the pioneers of Multiple Cropping Systems in the Philippines, featured in this compendium, to make our farmers climate-resilient

▪ Former Professor and Vice-Chancellor at the University of the Philippines Los Baños

▪ Co-author of the widely used book entitled,
  • Statistical Procedures in Agricultural Research published in 1976
  • Multiple Cropping in the Humid Tropics of Asia published in 1983.

▪ 5th Director of Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) from 1988-1993.
Thank you!