

Appropriate-scale Mechanization Consortium for Sustainable Intensification (ASMC) in Cambodia: Engagement of stakeholders

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Content

- Overview of the project
- Technologies introduced
- Process of stakeholder engagement







Overview of the Project

- **Project title:** Appropriate Scale Mechanization Consortium for Sustainable Intensification
- **Objective:** i) to assess the performances of appropriate-scale machinery (ASM) for rice farming and diversification with fodder species (i.e., affordability, practicability, efficiency, labor saving); ii) to train smallholders, service operators and students on the use of ASM; iii) to support multi-stakeholder initiatives initiating a negotiation process between farmers for the individual or collective management of fodder sources or crops diversification after wet season rice.
- **Partners/Members:** DAEng, CASC/CIRAD, UBB (CA for vegetables)
- Source of Fund/Amount of Fund: SIIL/USAID
- Implementation period/duration: Oct 2015-Sep 2019
- **Project Location:** Battambang, Siem Reap, and Kampong Thom
- Beneficiary: farmers, local manufacturer, students, and others







Defining Roles









cirad

Upper sandy terrace



4. Our Main Locations





Technologies Introduced

- Seeders for 2- and 4-wheel tractors
- Bucket scrapper for laser land leveling
- Rice broadcaster
- No-till seeder
- Options of farming systems for CA
- CA for vegetables







Seeders for 2- and 4-wheel Tractors



Seeder for 2-wheel tractor

The seeder design and prototyping began through funding by ACIAR. Modifications were done by the Department of Agricultural Engineering and the modified prototypes are being evaluated by the appropriate Scale Mechanization Consortium (ASMC) team in Cambodia.





Seeder for 4-wheel tractor









Bucket Scraper, Rice Broadcaster, and No-till Seeder



Bucket scraper for laser leveling







No-till seeder





Development of Farming Systems for CA













CA for Vegetables

- CA vegetable production
- Appropriate tools for CA vegetable farmers













Sustainable Intensification



Process of Stakeholder Engagement

- Survey, Participatory game
- Study tour/field day/demonstration
- Training/workshop
- Hub Advisory Committee
- Social network (Facebook and Youtube to promote project activities to stakeholders, Facebook messenger for Hub Advisory Committee)
- Technology Assessment







Survey/Participatory Game

- Baseline survey of the target group
- Survey of service providers
- Role-playing game to assess farmer perceptions on the innovations









Study Tour/Field Day/Demonstration

- Study tours for students to the project sites
- Field days for stakeholders such as farmers, service providers, government officials, high school students, researchers, NGOs, donors
- Demonstrations of the technologies to stakeholders and collect their feedback for improvement









Student study tours to project sites













Extension and capacity building











Sustainable Intensification



TRAINING/WORKSHOP

- Launching workshop of the project
- Consultative workshops to collect inputs for the prototypes development and Strategic Plan for Agricultural Engineering in Cambodia 2016-2020
- Consultative workshop to improve curriculum implementation of Agricultural Engineering program
- Stakeholders training on Machinery for CA, Seed
 Drill and Its Effectiveness



Training workshop on Mechanization for Conservation Agriculture at Don Bosco Battambang











Sustainable Intensification



Consultative Workshop on Curriculum Development of Agricultural Engineering

- Those same contents in different subjects were suggested to modify to suite the duration of each course, the concepts to be introduced to students should be organized according to its difficulty, and the important missing contents should be included.
- Some necessary equipment was identified and would be purchased through the financial support of the ASMC project in order to provide a good opportunity to students to practice in addition to learning theory.











Publication of Strategic Plan for Agricultural Engineering in Cambodia 2016-2020











Hub Advisory Committee

- Chaired by the Rector of RUA
- Members: academia, government, NGO, private sector, farmer association, extension worker
- The committee meet twice a year to monitor the progress of the project implementation and provide feedback on future direction especially training contents for stakeholders









Social Networking

- Promotion of the project activities though website, Facebook, and Youtube
- Beside the Hub Advisory meeting, the member communicate using the group on Facebook messenger as well as share information







Casaenet and ASMC websites http://www.casaenet.org



http://www.asmc.casaenet.org









Framework for Technology Assessment

- Sustainable Intensification (SI) framework , developed by Sustainable Intensification Innovation Lab (SIIL), is being used to assess technologies
- SI domains: Productivity, Economic, Environmental, Social, and Human Condition; SI toolkit available online at <u>https://sitoolkit.com/</u>









Congratulations! All 5 domains have been included in your SI assessment!

Add Metric

Add or Edit Category

Source: https://sitoolkit.com/radar-chart-generator







Thank You for Your Attention















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