

SATNET Intraregional Visits for Smallholder Value Chain Actors in Southeast Asia

20-25 July 2014 (Thailand) and 4-9 August 2014 (Cambodia)

Introduction

As part of Work Package 4 of the Network for Knowledge Transfer on Sustainable Agricultural Technologies and Improved Market Linkages in South and Southeast Asia (SATNET Asia) project, CAPSA in collaboration with national partners recently organized two successful 'Intraregional Visits for Smallholder Value Chain Actors in Southeast Asia'. The objective of the visits was to expose smallholders to good practices and technologies for sustainable agriculture, allowing them to see the efficacy of these practices, interact with local champions, and thus supporting the dissemination and adoption of these practices in their own communities. The visits focused on crop production technologies, Integrated Pest Management (IPM), and post-harvest and marketing which are of strong relevance to the region, while also complementing the SATNET regional and in-country workshops and training programmes already organized in these specific areas. During the tours, there was an air of excitement as participants saw new techniques such as biological pest control, and had in-depth discussions to compare them with what they do back home. Some of the participants mentioned plans to implement these techniques in their communities.



Participants of Thailand visit



Participants of Cambodia visit

Organization and participants

The first visit was organized in Thailand from 20-25 July 2014 in collaboration with AVRDC-The World Vegetable Center, the Department of Agricultural Extension (DOAE) of Thailand, and Kasetsart University. The second visit took place in Cambodia from 4-9 August 2014 in partnership with the Cambodian Center for Study and Development in Agriculture (CEDAC). Each tour had around 20 participants representing farmer organizations or lead farmers, extension workers, grassroots NGOs and government departments,

from Cambodia, Lao PDR, Indonesia and Myanmar. The participants were selected prioritizing candidates with a lead advocacy role in their communities or organizations for effective dissemination of good practices learned.

Technologies and practices demonstrated

In *Thailand*, the participants visited a number of progressive farmers growing vegetables as per Good Agricultural Practices (GAP) standards and got a hands-on opportunity to see innovative practices in organic farming, vermicomposting, production of liquid bio-fertilizer, use of safe and eco-friendly bio-botanical pesticides, and new methods of irrigation. They also visited laboratory and research facilities where they were exposed to safe biological pest control methods and post-harvest/food-preservation techniques. Moreover, they participated in a Farmer Field School session for a rice farmer community which demonstrated the 'farmers as researchers' concept in practice. On the final day, the participants visited one of the largest fruit and vegetable wholesale markets in Bangkok to obtain a better understanding of the marketing end of the value chain.

In *Cambodia*, the participants were exposed to CEDAC's initiatives in the areas of organic crop production and community mobilization. Site visits to farmers' fields demonstrated integrated and multipurpose farming techniques including System of Rice Intensification (SRI), fruit and vegetable cultivation, aquaculture, and poultry rearing. An award-winning farmer who had attained the highest yield through SRI in Cambodia (three times the national average) shared her experiences and learning with the participants. The visitors also observed farmer saving groups and cooperatives in action which are bringing tangible benefits to their members by establishing warehouses and rice milling units in order to corner a greater share of profits and allow farmers greater control over the value chain. Another important area of learning was CEDAC's agricultural marketing initiatives involving Nature Agri-Product Shops which run on a cooperative model and help farmers realize prices 20 – 30% higher than the usual market rates for their produce.

A sample of the technologies demonstrated to participants during the visits is as follows:

1. *Integrated crop production and aquaculture*: On-farm ponds for storing irrigation water are used for aquaculture, which provides a useful source of proteins for farmers while at the same time enriching nutrients in the irrigation water for better crop production.
2. *Vegetable production in bag*: A bag is filled with soil to enable production of vegetables. A hollow pipe with small holes along the sides is inserted down the centre of the bag to allow watering of the crop at a slow pace. One refill of water in the pipe is sufficient for two days which results in significant water saving. This technology is suitable for water-scare locations and supports climate change adaptation at the farm level.
3. *Pest control on bean creeper*: Long strings are tied to the top part of the creeper to enable ants to climb up from the ground and control harmful pests.
4. *Compost and biogas*: Compost is prepared using a mixture of cow dung and water. Bio-gas is also generated in the process through a 'bio-digester' unit.
5. *Off-season lemon cultivation*: Soil and manure are filled in a circular cavity with concrete walls to grow lemon in the off-season which fetches a high price.

6. *Irrigation for raised vegetable beds*: Water channels are dug amongst raised vegetable beds and a boat-mounted water pump is used to irrigate the beds. The water channels also make it easier to collect and transport the vegetables after harvest.



1. *Integrated crop production and aquaculture*



2. *Vegetable production in bag*



3. *Pest control on Bean*



4. *Compost preparation and bio-gas generation*



5. *Off-season lemon cultivation*



6. *Irrigation for raised vegetable beds*

Outcomes

There was lively interaction throughout both the visits amongst the participants and the stakeholders visited, indicating that they greatly benefited from them. In their feedback to the organizers, the participants reaffirmed that they had found the visits very useful and had gained a lot of new knowledge and ideas, particularly in relation to sustainable crop production practices, organic farming, mobilization of rural saving groups and cooperatives, and marketing of agricultural products.

The participants conveyed that they were inspired by the technologies and impactful work they had seen, and that they would utilize and disseminate the learning upon returning to their home countries. One of the participants, for instance, indicated that he would immediately apply the method of pest control on bean on his farm in Lao PDR upon going back. Another participant highlighted the potential of replicating the off-season lemon cultivation methodology as well as other practices in Indonesia, and mentioned he would apply many of the approaches learned during the visit in his community right from the next season.

A number of useful lessons emerged from both the organizational as well as substantive aspects of the visits. First, organizing such visits at a sub-regional level (eg. for Southeast Asia) is helpful given that this implies a greater level of similarities in agricultural production systems between participating countries, which in turn, better allows farmers to apply the good practices learned at home. Second, while the

participating group predominantly comprised of lead farmers, community leaders and grassroots extension workers, having a limited number of participants from NGOs and government officials allows the group to gain from diverse perspectives. Third, care was taken during the selection process to ensure each country's participants group included one English-speaking person who could facilitate translation. Fourth, SATNET has played a useful role in linking different stakeholders with the in-country partners making a key contribution by helping to identify suitable participants. Finally, demand was also expressed that – given their potential for effective knowledge sharing at the farmer level - more such exchange visits should be organized by SATNET and that the visits should be of longer duration.

Overall, the visits strengthened the capacities of smallholder representatives for practising and promoting sustainable agriculture, and it is amply clear that such an approach is valuable for enabling intraregional learning and productive knowledge exchange.