

CASE STUDIES FACTSHEET

N°:
Date of Interview: 29/August/2016
Enumerator name: Em Chomreun

I. GENERAL INFORMATION

Contact detail	Name: Mr. Yeng Song	Position:	Farmer
		Tel	092 320 947
Location	Kok Russey Cheung village, Danrun commune, Sotr Nikum district, Siem Reap province		
Type of Agro-ecology schools	Specify		
<input checked="" type="checkbox"/> Agroecology	Garden, vegetable and rice		
<input type="checkbox"/> Organic agriculture			
<input type="checkbox"/> IPM			
<input type="checkbox"/> Agro-forestry			
<input checked="" type="checkbox"/> VAC/Integrated farming system	The integration of multi-purpose trees, fruit trees, rice, vegetable and livestock within a specific plot		
<input type="checkbox"/> System of Rice Intensification			

II. FARM BACKGROUND

	Detail information
Small farmers (family size & Labor)	6 people, all main labor. But only Mr. Yeng Song involves in garden activities.
Land ownership	- Whole garden size 35m x 100m, dividing into two blogs. Vegetable blog 35m x 30m, full year cultivation. Rice blog 35m x 60m. The rest 5 m is channel around rice blog.
Labor information	- He manages the whole garden alone.
Choice of crops and cultivation methods	<ul style="list-style-type: none"> - In his multiple purposes farm has various of crop where is divided into vegetable and rice blog, and surrounding with trees. There are about 15 types of crop in the garden. - Most of seeds are bought from store in market, and some receive from APICI project. - Soil preparation and planting: After he digs soil and dries it for around 7 days, he adds compost or cow dunk 100kg in a 25m² bed. Then, 3 days after he start to plant crops. 2 weeks later he put compost again (200kg/25m²). He applies permanent-raise bed so, those vegetable beds will not be plough. Furthermore, after crops are planted, he mulches the vegetable bed with rice straw or tree's leave in order to keep soil moisture, protect some weeds, and protecting soil erosion because bed is raise. <p><u>Solid compost</u></p> <ul style="list-style-type: none"> - This compost is prepared by using plant residues and some animal dunks. Compost is made without compost house; he makes a compost pile outside. He uses plant residues or all organic matters that can be decomposed, all dry and fresh. And, put it as layers of about 5-10cm thick and 1-1.5m height, between each layer he puts cow dunk and water it in order to boost decomposition. With this technique compost is ready to be used 3 months after.



	<p><u>Liquid compost</u></p> <ul style="list-style-type: none"> - Liquid compost is a mixing of Chromolaena odorata, cow or chicken dung, cow urine and other crop residues, fermenting with water for 2 weeks. To spray, he puts about 100 ml of liquid compost with 20 liter of water. It is sprayed every one or two weeks. <div style="display: flex; justify-content: space-around;">   </div> <p><u>Bio-pesticide</u></p> <ul style="list-style-type: none"> - He makes multi-plant extraction recipe which is trained by the project to make bio-pesticide. There are 3kg of lemongrass, 1kg of Chromolaena odorata, 100g of chili, and 1-2 liter of cow urine. Then cut these plant as small pieces and fermented in 10 liter of water for 2 weeks. Usage; 1 liter of bio-pesticide solution mix with water about 3 liters and 100cc of soap. She uses this every one or two weeks as recommendation. - Another one, he uses Thai basil to make a bio-pesticide. Fermenting 0.5kg of crushed Thai basil with 20 liter of water, and leave it overnight. This bio-pesticide can be used directly without adding more water. <div style="display: flex; justify-content: space-around;">   </div>
<p>Year in practice (>2-3 cropping cycles)</p>	<p>He has started vegetable cultivation since 2006, growing on tables. After join APICI project in 2010, he is turning to agro-ecological practice, and now he applies also some techniques that he had learnt after visited in India, those, raising bed and compost.</p>
<p>Economic benefit</p>	<p>Comparing to his previous conventional practices, he spent a lot on pesticides and chemical fertilizer. Now with agro-ecological practices it could notably reduce production costs in his garden. He doesn't spend any money for chemical fertilizer and pesticide anymore. He makes compost and bio-pesticide instead of using chemical-agricultural substances. And those raw materials for compost and bio-pesticide can be found anywhere for free, especially in rice field and around the house. Moreover, micro-irrigation system allows him to access water easily and use it more effectively. He spends less time and labor force for managing his garden. So now he could get more profit because of the production cost is lower.</p>
<p>Peer-farmers adoption</p>	<p>As his garden is located in rice field, and far away from home. He observes that there is no one come to see or interested in what he is applying. But he hosted many farmers come to visit his garden.</p>
<p>Market outlet</p>	<p>Normally he brings his vegetables to sell directly at market. It is because of he grows rotatory many kinds of crop, so vegetables are not harvested all at once. Do like this he can get better price than selling to collectors. Or sometimes if price at market and collectors is very similar he will sell to collector.</p>
<p>Things learned from India</p>	<p>Solid compost, Crop association, inter crop, mulching, permanent-raise bed and repellent crop.</p>
<p>Applied after India</p>	<p>Solid compost, mulching, crop association, inter-crop, permanent-raise bed.</p>
<p>Messages to share</p>	<p>Lowering production costs is important. Farmers can reduce it by minimizing external inputs. As his experiences, chemical pesticides and fertilizer are the main expenditure. So, now with agro-ecological techniques it allows him to save the costs and other unnecessary expenses. He suggests farmers to use compost. Compost is very good and important than can be replaced chemical fertilizer. And, the important thing is compost can be made with local materials such as rice straw, trees' leaves, and other organic materials. To reduce chemical pesticide needed, he suggests farmers to do crop rotation, inter-crop and crop association. These cultivation practices help to prevent some insects and diseases, and plus with bio-pesticides it may help to reduce lot of expenses on chemical pesticides. He mentioned, "clearly, all farmers can do this kind of compost because it is easy to make and use simple materials. Furthermore, using compost and bio-pesticides is a good way to improve soil quality and food safety."</p>

III. AE LAND LOCATION AND TRANSECT LANDSCAPE





IV. DESCRIPTION OF INITIATIVE (BACKGROUND, REASON FOR STARTING THE INITIATIVE / GETTING INVOLVED, TECHNICAL SUPPORT RECEIVED, ECONOMIC ANALYSIS / PERFORMANCE, LESSON LEARNT, ETC.)

Mr. Yeng Song, he is 48 years old. He lives in Kok Russey Cheung village, Danrun commune, Sotr Nikum district, Siem Reap province. He started his garden in 2006, but what he did was similar to other farmers. He used chemical fertilizer, pesticides and plough soil every time before planting. He added chemical fertilizer at least 2 times and pesticide more than 3 times per crops cycle.

However, when he has been with APICI project in 2010, he has attended many trainings and exchange visit in and outside project areas. Through these events resulting him to change his habits because he could see the important of agro-ecological practices that have been promoting by APICI. Then, he starts to reduce chemical substances in his garden. He turns to use animals' dunk and cow urine as a liquid fertilizer.

With technical support of project team, he become better and better. Later on, basing on his hard work and good performance, he becomes a pilot farmer who play an important role to disseminate good agro-ecological practices to other farmers.

Clearly, after he visited agro-ecological farms in India with APICI team he tries to improve his garden, by mainly using solid compost, liquid compost and bio-pesticide that he makes inside the garden. He mentions that this compost is an important thing to improve soil quality. He makes this compost with available local material inside his village. It needs a little bit time and labor force, but no need to spend any money to make it and absolutely better than chemical fertilizer. "I love this compost", he said. On the other hand, to reduce the expense on chemical pesticide and its harmful, he makes various types of bio-pesticide. He sprays these bio-pesticide to prevent insects every one or two weeks. Now he feels appreciate with the result he gets. His crops grow very well without any chemical inputs, especially fertilizer and pesticide. The last things that he is really happy with are costs reduction and safe products that he gets.

V. POTENTIAL ON SCALING UP - DISSEMINATION

As he is a pilot farmer of the project, he hosts many exchange visits of farmers come to visit his garden. He also went to an exchange visit to India to learn agro-ecological practices there. When he come back, he has been applying those techniques that he has learnt such as compost, permanent-raise bed, crop association, inter-crop and mulching.

VI. ADDITIONAL INFORMATION AND SUGGESTION