



## **ACTION FOR RESEARCH AND DEVELOPMENT**

### **REPORT ON FIELD VISIT OF PESTICIDE USE FOR VEGETABLE CULTIVATION IN RUSSEY SROK COMMUNE, SREY SANTHOR DISTRICT, KAMPONG CHAM PROVINCE**

#### **I. OBJECTIVE OF THE FIELD VISIT:**

The field visit was conducted to respond to the ARD vision and mission which is one NGO focused on Ecological Agriculture, Natural Resource and Environment. Our purpose of the field visit is to identify the real situation of the farmers in vegetable cultivation and pesticide use in the target commune. After field visit we will find out the appropriate recommendations for assisting farmers in increasing the vegetable production and reduce any issues (impact) in case they were affected from pesticide use.

#### **II. DURATION AND RESPONSIBLE PERSONS FOR THE FIELD VISIT:**

The Field Visit was conducted within two day period on 26-27 March 2007 by two ARD staff, those are

1. Mr. Suon Sokheng, Executive Director
2. Mr. Neth Sophyron, Field Survey Assistant.

#### **III. RESULT OF THE FIELD VISIT:**

##### **A. LOCATION OF THE FIELD VISIT:**

The field visit was conducted in all four villages of Russey Srok Commune, and one village of Svay Sach Phnom Commune. Those visited villages are:

1. Russey Srok Commune: Thnoat Leu, Thnoat Krom, Prey Toteung, and Russey Srok villages
2. Svay Sach Phnom Commune: Svay Leu village

##### **B. PEOPLE MET DURING FIELD VISIT:**

During the field visit we met two main kinds of people; those are Commune Council and Farmers who are involved directly in vegetable cultivation and pesticide use. The met people are:

1. Mr. Ty Tieng, Commune Council ( of Russey Srok Commune)
2. Mr. Keo Meng and his wife, Farmer on Crop Cultivation (Corn, Rice, Tobacco, peanut), he is also a Commune Council Candidate for the commune election on First, April 2007.
3. Mr. Uk Nin, Farmer on Rice production and he is also a Commune Council Candidate for the commune election on First, April 2007
4. Mr. Lay Ov and his wife, Farmer on Vegetable cultivation

5. Mr. Nem Rim and his wife, Farmer on Vegetable cultivation

### **C. GEOGRAPHY OF THE TARGET COMMUNE:**

Russey Srok which is one among 16 communes of Srey Santhor District, Kampong Cham Province located along the Mekong River about 65 Km eastern from Phnom Penh and there are 1,340 families in total and equal to the 5,702 persons who have more than 80% are living depends on agriculture production particularly in rice and vegetable cultivation (cucumber, long bean, tomato, chilli, garlic, cabbage, round cabbage, etc.). There are four villages in this commune are:

1. Thnoat Leu Village: 449 families equal to 1974 persons including 1083 women
2. Prey Toteung Village: 364 families equal to 1576 person including 800 women
3. Russey Srok Village: 304 families equal to 1267 persons including 773 women
4. Thnoat Krom Village: 223 families equal to 885 persons including 464 women

It is not only Russey Srok Commune that people living depends on agriculture farming, but the neighbour communes such as Svay Sach Phnom, Prek Rumdeng, Prek Dambauk, and Baray Communes, the agriculture field is also main occupation of the farmers

### **D. CROP CULTIVATION AND PESTICIDE USE SITUATION:**

Refer to Mr. Ty Tieng, Russey Srok Commune Council member, there are more than 80% of the people in this commune are farmers who cultivated rice and crop (Corn, cucumber, long bean, tomato, chilli, garlic, cabbage, round cabbage, etc.) for supporting their livelihood. Among all of them there are around 100 families who are permanent farmers and they cultivate vegetable for the whole year. The vegetable products of the farmers were sold for the whole people in their own and neighbour communes, Srey Santhor, Kampong Cham, and Phnom Penh. He also mentioned that 100% of the farmers used pesticides for their vegetable production in order to prevent any destroy from diseases and insects. Sometime in order to get good looking on their products, the farmers also use some chemical inputs on the products only one night before selling out. Mr. Ty Tieng added that since the Pol Pot regime was collapsed in 1979, he noted that there was no any NGO focused on agriculture technology, particularly in Pesticide Use and Its Impact implementation in this commune. By seeing the serious issues, the commune council always raised the problem of pesticide use and asked for getting any extension or training from other technical institutions or NGOs during the District Integration Workshop which conducted every year in Srey Santhor District. But his commune never gets any respond from involved institutions and NGOs.

Mr. Ke Meng, 58 years old who is a commune council candidate for the commune election on First, April 2007 told us that his family is living depends only on agriculture production that his family contain a lot of farm land plots for planting rice and some kind of crops (corn, tobacco, peanuts, etc.). The pesticides and chemical fertilizers are only one choice for his family to use in preventing their crop productions from any destroy. He used these chemical products when their crops neither not growing well nor having any diseases in order to get more yields for his family. Even he always used the pesticides but he did not remember the trademarks of those products because he did not understand about foreign language so when he needed the pesticide he just told the businessmen about the situation or symptom of their crops was finished. He added that he did not carry out properly the methodology for using pesticide (including spray out, keeping and cleaning equipment after using, etc.) as he thought that it is no problem occurred on their health. But according to his wife, Mrs. Touch, told that last year there was one farmer named Mr. Meas Chhat got serious toxin by spraying pesticide on his rice field without using Mass and Clothes. The affected farmer was transferred to district hospital for treating for a few days before getting better. Mr. Meng, mentioned that his soil fertility was

going down because of using chemical fertilizers as well as pesticides in what he told that currently he got only around 100-200 Kg of corns while before 1995 he got around 800 Kg of corns on the same farm land size.

Mr. Uk Nin, 65 years old who is a retired teachers in Russey Srok High School told that even he planted rice and corn on his small farm land, but he also still used the pesticide on their crops because he had no choice or any method in case there were any destroy on their crop. As he known from his neighbour farmers, the more pesticide toxin is the more popular for using among farmers because their crops will grow or get better as soon as they expected.

Mr. Lay Ov, 58 years old who is a permanent farmers on mix vegetable cultivation (cucumber, long bean, tomato, chilli, garlic, cabbage, round cabbage, etc.) in all season within the year said that he always use pesticides (he preferred the one that contains high toxin substance) on their vegetable production and he is not paying more attention on the methodology for spraying those pesticides as he noted that he as well as his son never got any problem from the pesticide use. During his pesticide use, he always just get a short trousers and Crama to close his mouth, but sometime he also get cigarette during pesticide spraying. After using pesticides, the empty bottle was throw away nearby his land and equipment was cleaned with water in a small well in which he always go down into that well for bringing water. His wife, Mrs. Chhun said that her vegetable was sell in the local markets except sometime when her products are flooded, it will bring to sell at Phnom Penh. Among all vegetable species she planted, the pesticides were used much possible on round cabbage because it is always get serious destroy from insects.

Mr. Nem Rim, 60 years old who is also permanent farmers on mix vegetable cultivation living in neighbor village (Svay Leu Village in Svay Sach Phnom Commune) of Thnoat Krom village told our team that his family is living depends on the vegetable growing by renting farm land from other owners while his family do not have any land for their own title. The vegetable he cultivated are Cucumber, Longbean, Bitter Melon, and Cabbage Species. The products of his vegetable is sold to middlemen come from Phnom Penh, Srey Santhor and Korng Meas district. He also used pesticides on their cultivation and he noted that his health seem to be weak down from year to year which caused by pesticide impact. His wife told us that a few years ago there was one man who cleaned the equipment (after pesticide uses) getting serious symptom (Prakach) then was treated at district hospital for a few days before becoming good.

#### **IV. SUGESTION FROM PEOPLE IN COMMUNE:**

Mr. Ty Tieng, one commune council we met during field visit asked our team to provide any properly use of pesticide, he is strongly want to have any extension or training on pesticide use method and its impact as well as technology for agriculture production for our farmers in this commune. One more very important thing, he also expressed that after extension on pesticide impact, the organization should consider for mainstreaming and establishing any demonstration on other product which can replace pesticide use so that the farmers can reduce the pesticide use and any negative impact. Furthermore he would like to suggest in establishing the group or community of Vegetable Farmers in order to improve the situation of the vegetable yield as well as their living condition.

All the farmers we met during field visit are very appreciated to get any extension or training on pesticide use method and its impact as they will understand more clear about the problem in furture and can prevent it properly.

Mr. Nem Rim, farmers in Svay Leu village of Svay Sach Phnom Commune (next to Thoat Krom village of Russey Srok Commune) raised that he would like to get the capital support from any

NGOs while he as well as other farmers in the village always get loan from middlemen for starting vegetable cultivation every year. He added that sometime the vegetable products were destroyed or sells out in the low price that cause their income is not enough for supporting their livelihood.

## **V. CONCLUSION:**

Refer to the information got from local authority (Commune Council) and farmers, we found that there are a lot of Pesticide use on crop production in this commune as well as neighbor communes. Even most of farmers did not remember about the pesticide product names, but they showed that they are very interested and used the pesticide which have strong toxin in order to get good result for treating and growing of their crops. Most of the farmers do not understand well and pay more attention on pesticide use method including spraying, keeping, and cleaning after using those products. The important points, all the people we met during field visits expressed their willingness to get and join in any extension or training on the Pesticide Use Method and its Impact in order to reduce any negative impact on their health and soil fertility.

## **VI. RECOMMENDATION:**

Through field visit we found that it is very important in raising awareness among farmers focused on Pesticide Use Method and its Impact as they do not understand well and always ignore about the affection from the pesticides on their health in future.

We are strongly support to the ideas/suggestion of the Commune Council Member, Mr. Ty Tieng, is that it is not enough just only extent them about the impact but the replacement of pesticide by another inputs is better way for insuring the reduction pesticides. The Farmer Community establishment is also main factor for helping the success of vegetable cultivation.

It would consider to designing a project which included the demonstration and farmer community establishment after conducting extension on pesticide impacts.