



Case 1. Ms. Do Thi Hai, Chairwomen of Women's Union, Nghia Minh Commune

Ms. Do Thi Hai was one of the pioneers successfully applying the model of earthworm raising in Nghia Hung district.

In Nghia Minh commune, most of the households there work in agriculture. They plant 2 rice crops and 3 vegetable crops per year, some of them grow fruit trees.

Therefore, local people have to spray chemicals from 3-5 times per crop to prevent pests and diseases. They also have to spray growth stimulants as well.

The majority of women in Nghia Minh commune spray chemicals, accounting for nearly 80% as men go to work far away. Women exposed to much pesticides, affecting their health. There were women who were pesticide poisoned such as red back, lumps, itching, aches, heated body and had to go to hospital for treatment. Besides, local women aged 35 and over could not find jobs in companies, their family economy is difficult as they do not have secondary jobs apart from the rice and vegetable planting.

As chairwomen of women's union of the commune, I always worry about finding jobs for over-aged women to work in companies. Encouraged by the Nghia Hung district's Women's Union, I organized a visit to the model of earthworm raising in Hai Son commune, Hai Hau district for our some women. After the exchange visit, I pioneered to carry out the model of earthworm raising. As a result, my earthworms grow well. The earthworms are fed by all kinds of organic wastes, cow and buffalo dung. The earthworms are used to make foods for livestock and poultry, and the earthworm humus are used to fertilize all kinds of vegetables and plants to help improving soil and limit the use of pesticides.

Thanks to the support of the project "Sharing experience and replication of closed loop agricultural model adapted to climate change through earthworm raising for poor women in Nghia Hung district", I and 29 other members in the communes of Nghia Minh and Hoang Nam participated in training courses on earthworm raising techniques, how to make organic food from the earthworms, how to organize the group meetings and product marketing. After the trainings, the class was divided into 4 groups, in which was one group of 5 women from Nghia Minh commune. I was assigned to be group leader. At the same time, the standing committee of the commune's Women's Union bought 170kg of small earthworms from Hai Son commune to provide our group members.

On October 5th 2017, our group held the first meeting to develop group regulations of 1 meeting/month, finalized to fund raise with amount of 50.000 vietnamdong/share. The purpose is to save money for group members to have chance to have a loan (when there is a need to invest in livestock, crops, etc.). In each group meeting, group members shared their experience in how to raise earthworms, how to develop their livestock, crops from the earthworms. Thanks to the group meetings, I have experienced and understood the value of connecting members into a production activity.

With knowledge learned from trainings, and through the experience in the group meetings, group members advocated their surrounding households to participate in the group activities. And now our group has 3 more members as a result. Now we have 8 group members, they all actively replicate their earthworm raising areas. Now we have replicated 32m² of earthworms to produce foods for 245 chickens. Since raising the earthworms, we use the earthworm, corns, rice and vegetables are pressed to make foods for pigs and chickens. Thereafter, the cost of food reduce 1000-1500 vietnamdong/kg compared with industrial foods. In addition, chickens raised with earthworms are very sweet and tasty and the surrounding communes often buy my chickens.

Recently, our group members have sold 150 chickens. After subtracting the costs of livestock raising, the profit of raising chickens with earthworm is 1.5-2 million vietnamdong higher than profits of raising chicken with industrial bran.

An other benefit from raising earthworms is to improve the environment. In the past, the cow and buffalo dungs were scattered across the village. Even there were households who raise many cattle could not dealing with the dungs and had stinky smells and was reported to the communes' people's committees. Since our group's raising earthworm, the situation has been dramatically improve. We made used of the cow and buffalo dungs as food for earthworms. Every afternoon, we went to the household raising livestock to ask for cow and buffalo earth. And also, our group rode bicycles to collect cow and buffalo dungs.

Since raising earthworms, we have used the earthworm humus (earthworm dung) to fertilizer vegetables. In recent crop, I grew onions, tomatoes, garlies very well as I fertilized the earthworm humus and did not have to use any nitrogenous fertilizer as well as spray pesticides to prevent pests.

In summary, the model of earthworm raising is very effective with low investment cost. I make use of old coops of chickens and pigs, renovate the drainage ditches to make worm cages. I spent 400.000 vietnamdong to buy the earthworm biomass at the beginning. Then, I did not have to buy any more earthworm biomass. With only just one million vietnamdong, the benefits brought by earthworm raising is very great, helping my family to increase income from livestock raising, making our surrounding environment clean. The model also promotes the eco-agricultural production, reduces the use of chemicals in agricultural production.