INTRODUCTION



Strengthening Farmer Interest Groups among Ethnic Minorities in Nghe An and Hoa Binh provinces has been a joint project between Farmer Union in Nghe An an Hoa Binh provinces and ADDA - Agricultural Development Denmark Asia. Colloquial we have called the project "FIGNAHB". The project was granted DKK 4,994,507 from the Danish donor Civil Society in Development (CISU) and started January 2013 and will end in December 2015.

The main objective of the project has been to contribute to the improvement of livelihoods of ethnic minorities in rural areas. In order to improve the livelihood in the involved communities ADDA and Farmer Union in Nghe An and Hoa Binh have engaged with 220 farmer interest groups (FIGs), which comprises about 5,500 farmers. Through trainings in agricultural production on pig raising, chicken rearing, deer farming and crop cultivation (of crops such as green gourds, oranges, and sugar cane) the members of the farmer interest groups have gained new knowledge to improve their agricultural production, income generation, and living conditions.

To improve the organization of the farmer interest groups the project has sought to enhance groups' knowledge of the Decree No 151 and the Law on Cooperatives. To support the development of the participating groups the project has also included trainings on market analysis and business planning. All 220 FIGs have attained the Decree No. 151/2007/ND-CP document. This is an important document for groups and cooperatives when developing their business.

Changes for rural communities are dependent on many factors. In order to influence local decision makers the two partners - Hoa Binh Farmers Union (HBFU) and Nghe An Farmers Union (NAFU) - have in cooperation with farmer groups engaged in dialogue with the local governments on rural development and rights of ethnic minorities.

This booklet presents stories from farmer groups in Nghe An and Hoa Binh and it is meant to be a catalogue for inspiration.

Arafa Ayoub Khatib ADDA Representative in Vietnam



STRENGTHENING FARMER INTEREST GROUPS AMONG ETHNIC MINORITIES IN NGHE AN PROVINCE AND HOA BINH PROVINCE



Success Stories in Hoa Binh

ADDA has supported the capacity building of the groups of farmers raising chickens, pigs, and growing sugar cane, oranges, green gourds in the districts of Da Bac, Lac Thuy, Ky Son, Cao Phong.



OFF-SEASON GREEN GOURD IN CA VILLAGE

There are 102 households with 417 people, 180 of which are at labor age in Ca village, Liên Vu commune, Lac Son district. The rate of poor household was 37% in 2012 with the average income per head of 5.6 million dong/year. Thus, there has had no remarkable improvement in the level of cultivation and intensive farming for multi-crops & higher productivity.

Since the establishment of a common interest group of 10 farmers, the farming practices have changed from scattered & small-scale to concentrated production. The group has been operating stably. All group members have moved from cultivating traditionally to applying advanced techniques to their production. The whole group is eager to participate in technical training on green gourd growing and learned by heart all the production stages from soil preparation, seed selection, seedling cultivation, caring, pest control to harvest.

This year, the group has decided to grow off-season green gourd using pest-resistant variety, i.e. Quan Nong Phat and QNP 36. The decision was made because in the most recent crop, mass production of gourd resulted in the fact that many farmers had lost due to low selling price of vnd1,220/kg and was not able to re-invest in production. Therefore, the production of off-season green gourd has been considered as an solution to get high selling price

In the summer-autumn crop 2015, Ca village had 4.7ha of wax gourd in which over 2ha is of the common interest group. Thanks to proper application of techniques, wax gourds have grown very well, bearing more



Off-season wax gourd - better for farmers in Ca village

evenly big gourds which the wholesalers prefer. The farm gate price was 12,000d/ kg, ten fold higher compared to that in the previous crop. Ms. Lich only has grown gourds on 1,000m² and earned 30 million dong. Another group member, Ms. Bui Thi Nim, with smaller land of 700m² also got 21 million dong from growing gourds.

Mr. Bui Van Ty happily shared "Green gourds from this crop were sold out at higher price; one carry of gourds was sold out with total amount of 700,000 dong". Within nearly 3 months, the production of gourds on 1,000m2 helped Ca farmers earn 30 million dong of which 25 million dong was the profit. If the price of green gourds remains good, the profit from producing wax gourds is 8-9 times higher compared to that from rice growing.

Mr. Bui Van Hop - the vice group leader affirmed that it's possible to grow gourds in 3 main crops- winter, spring & autumn. This year, we have made a fat profit from growing off-season green gourds.

GOOD CHICKEN RAISING FAMERS

15 farmers of Bung hamlet meat chicken farming group of Huong Nhuong commune (Lac Son District) are well known as good chicken farmers. **77**

he garden area of Ms Quach Thi Hoa, Deputy Head of the group is located on a land lot of 5.800 m² with surrounding fence. Chicken coop is 150 m² wide under the grapefruit and lemon trees- good environment for chicken raising. Ms Hoa owns 40 egg laying hens, 600 meat chickens and 800 chicks. All chickens are naturally fed and meat quality is good. At present, this chicken is sold at a double price in comparison with industrial or semiindustrial chicken. Every year, Ms Hoa sells 3 times. The net income after deducting all expenses is about VND 80 million. This income is enough for the living cost of her family including a couple and 3 children and also for saving. The spacious house built last year has been furnished with TV, refrigerator, gas cooker, fans, rice cooker, motorbike, etc. A family in mountainous area like her family is considered as welloff. Ms. Hoa was trained on the method of raising chicken, building coop, preventing diseases and feeding in the training courses held by ADDA project.

The chicken raising group was established on December 30, 2011 with the participation of 15 Muong women. This



Ms Quach Thi Hoa is checking the newly hatched chickens

group has its own operating regulations and organizes monthly meeting for information sharing in husbandry and providing mutual support for development. The initial fund contribution was VND 10,000 per person per month and after 1 year of operation, this limit is increased to VND 100,000 per month. The current fund has reached 22 million and the group has provided loan for 10 members for husbandry expansion. Each member raises at least 250 chickens and ducks. Many active members; for example, Ms Quach Thi Hoa, Ms. Bui Thi Huong, Ms. Bui Thi Nhun, Ms. Quach Thi Chien, Ms. Quach Thi Hai, Ms. Bui Thi Nganh raise from 1,000 to 1,500 meat chickens, selling from 2 to 3 times per year with yearly net income of VND 200 million

Mr. Quach Nghinh - Chairman of Huong Nhuong Commune Farmers Union said "the commune has 836 households including 170 poor households and 306 households of poverty thresholds. Only Bung hamlet has 136 households but poor households include 22 families and the remaining 48 households are near the poverty threshold. 100% participating households have escaped from poverty".

A CHAT WITH CHICKEN RAISING GROUP



The group often enhance their techniques in raising and disease prevention through referring to training materials

Chicken raising has become an efficient activity in Trung Thanh village. What is the group operating regulations?

The group organizes its periodical meeting on the 30th of every month for members to share experience and lesson learned in farming and to expose to scientific knowledge provided by ADDA trainers. The group also established a fund as loans for its members. So far, the total fund of the group is about VND 13 million, 12 million dong of which was lent 6 members.

What is the most recent achievement of the group?

In 2014, the group was recognized as a collaborative group in pursuant to regulations in Law on Cooperative and Decree No 151 of the Government.

What are the advantages of being a collaborative group?

Ms Dinh Thi Nhung, vice leader of the group, said they can make advance for members to purchase breeders, preventive medicines and feed. The group will be responsible for collecting money and paying up on selling chickens. In addition, we could also receive loan from the Development Fund by Provincial Farmers' Union for expanding farming scale, contributing to farmers' increased income.

What is the income of households?

Semi-confined chicken raising is now generating high and stable income. By the collaborative group's calculation, a member could earn a profit of 2,200,000 dong if he/ she raises 50 chickens within 3 months and sell at the price of VND 100,000 per kg. Ms Nguyen Thi Phong is the first person to achieve this income level.

Many group members have raised as many as thousands of chickens?

Yes. For example, Ms Tran Thi Lien has 1,300 meat chickens to be ready for sale. The household of Ms. Ngoc Thi No has 720 chickens amongst which 120 have been sold and the remaining 600 chickens are ready for sales. The household of Dinh Thi Nhung and Mr. KieuXuanThang has more than 300 chickens each. On average, each group member has raised 300 to 500 chickens.

What is the market for chickens?

Chickens are raised in big quantities but there is always market demand for chickens. Traders go to every household and offer the average price of VND 90,000 to 100,000 per kg. This is the local variety of high yield raised in semi-confined model, producing the high meat quality. This variety is the most consumed kind of chicken in the area, especially on such special occasion as wedding.

*Mr. KieuXuanThang – Village leader

The village was recognized that it moved out of poverty in 2003 and the average yearly income per head now reaches VND 19,5million.



CHANGING AWARENESS ON PIG FAMRING

There are 162 households with 800 people in Than Village, Tan Pheo commune, Da Bac district. 64 households out of 162 are poor. People there live on agricultural faming. As rice land is small, farmers have worked mainly on maize & forest product such as bamboo, woods or medical henbs Chicken & pigs are for improving their meals. Pig & chickens are let free and fed with mash, banana, and sweet potato leaves from the gardens, which generates no **J**income.

n 2009, ADDA-funded project was implemented in Da Bac district where the villages of Cham & Than in Tan Pheo commune were targeted. Technical training on planting rice, maize and raising fattened pigs in which climate change adaptation was a cross-cutting topic were delivered to farmers. This has contributed to create changes in farmers' awareness

A pig group of 10 households was developed in Than village. The group has been operating well & effectively since its establishment 5 years ago. This proved farmers reaped many benefits from the project

Mr. Ha Van Thich - chairman of Tan Pheo commune farmers' union introduced us to the pig raising model of the young couple - Mrs. Xa Thi Mui & Mr. Ha Van Dam. They started their own business by borrowing 600,000 dong from group fund to buy 3 hybrid piglets. Raising hybrid pigs was new to Mrs. Mui as she had raised local pigs which required no cooked mash but only chopped vegetables as feed. After a number of training on different topics including vaccination. disease prevention, she possessed more valuable knowledge. She raised the frist farrow of 03 pigs successfully and got 06 million dong which was used to pay back to group fund & bought 10 more piglets.

Mrs. Mui said her family had raised 03 farrow of fattened pigs of 10-15 pigs per farrow. Every year, she has earned over 100 million dong from pig sales. In addition, she has raised chicken and ducks as alternative income sources. From difficult living conditions, her family has become rich. While working hard on pig raising, she attended a cooking and will graduate soon. This is a result of changed perception since she joined the common interest group.

Mrs. Luong Thi Minh has sold 03 herds of pigs and earned 80 million dong every year. This income is used for paying schooling of the eldest child who is going to graduate from teacher training college.

Thanks to the amount of 3 million provided by the project, the pig raising group in Than village has developed a fund of 40 million dong which is used effectively to lend farmers for pig farming expansion.



Technical exchange group meetings pig

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SUCCESS STOTIES STRENGTHENING FARMER INTEREST GROUPS AMONG ETHNIC MINORITIES IN NGHE AN PROVINCE AND HOA BINH PROVINCE

TU LY WOMEN RAISING PIGS

Lt could be said that pig raising is the strength of the women in Chau village, Tu Ly commune, Da Bac district. **99**

By women in the sow & fattened pig raising group participated actively in technical training on caring sow, piglets, meat pigs and how to prevent diseases. To these women, pig raising is a habit & reason for their living.

Ms. Ha Thi Tam-the trainer took us to visit the model of Ms. Nguyen Thi Kiem whose pigs will be sold in few days. The current price of pigs is increasing and it's estimated that she could earn 30 million dong. Two years ago, Ms. Kiem's family has difficult living condition. 6 family members had lived on 2000 m² of rice. She had to borrow money from her relatives when attending wedding or being sick. The vicious circle of poverty clung to her family. In 2012, she was lent to buy an F1 sow. After 02 year raising, her first farrow of 07 pigs with the weight of 80kg/each was sold and she got 22 million dong. She bought more piglets and every 03 months, she has a farrow of pigs for sale.

According to the calculation by Ms. Kime & other group members, if piglets are available, every farrow of 08 pigs could bring them the profit of 14 million dong and 30



Herd of fast - growing pigs of Ms. Nguyen Thi Kiem

million dong for two herds every year. Since having income from pig selling, the living conditions of Ms. Kiem's family become less difficult

From the example of Ms. Kiem, more poor women in Chau village joined the group on voluntary basis, increasing the number of group members to 15 women. All members have raised sows for producing good piglets for fattening, lowering input cost and high resistance against diseases. The group has increased the group fund to 19 million dong from 03 million dong provided by the project. Additionally, Farmers' Union also provided the group with 30 million dong. The total group fund has been lent its members for buying more piglets and feed. The income from pig sale is used partially to pay back to the group fund which is then borrowed by other group members.

In the past, 12 out of 15 women in the group was poor but today only 04 household at the edge of poverty. It's good news that Ms. Quach Thi Tieu - a group member built a house which value was 200 million dong.

STRENGTHENING FARMER INTEREST GROUPS AMONG ETHNIC MINORITIES IN NGHE AN PROVINCE AND HOA BINH PROVINCE

GREEN GOURD IN PHU LAO



A garden of green gourd.

668 over 15 ha of land in An Ninh village of Phu Lao commune is planted with green gourd. Farmers are seen joysul & happy when having a bumper havest **99**

Minh said: "Early this crop, it is sunny and favorable for green gourd cultivation and the group was subsidized with VND 4.5 million to purchase a water pump to ensure sol moisture. Gourd has been developing very well. This year, some households by Boi river have suffered from complete loss due to flooding but the green gourd field of the group has remained unaffected".

Ms Vu Thi Thao has more than 1,000 m² of green gourds which are being harvested. 01 kg is sold at VND 14,000 and she has 9 Saos. It means that she earns hundreds of millions Dong this year.

Green gourds are long and plentiful because they are given right care techniques. Each gourd is ranging from 1,5 to 1,7 kg on average. Ms Mao said *"cultivation of this*

variety requires proper selection of seeds. If wrong varieties are selected, no fruit or very few fruits can be generated. Techniques for trellis making play an important role. We used to make the trellis in the form of A letter but after the training, square form is made, similarly for loofa trellis. This trellis can be made so gourds can be scattered evenly and the plant also absorbs maximum sunlight to be better at against pathogen".

Most of green gourd field on 15 ha of land of An Ninh hamlet does not require pesticide, has guaranteed quality and good look. Therefore, gourd is preterred on the market. Their products are wholesaled by traders who then sell the gourds in Ha Noi and completely sell out. Ms Nguyen Thi Ninh, group leader confirmed "cultivation in group helps to expand farming scale and its members usually exchange and discuss to share experience for the benefit of the group. Farming cost is, therefore, lower but economic values are higher".

Mr. Dinh Van Luc, chairman of Phu Lao Commune People's Committee said

" Initially, only a few households grow green gourd but fail to apply the right techniques. However, thanks to training, households have better income, up to hundreds of millions Dong, only from green gourd farming. This year, the commune has 40 ha of rice farming to be converted to gourd farming. It is expected that land area for green gourd farming would reaches 60 ha next year".

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A DYNAMIC FARMER

Le Minh Quy living in 2C village, Co Nghia commune, Lac Thuy district has used his 3000m² to develop the backyard chicken raising model.

uy said *"currently, he is raising about 5,000* chickens in which over 2,000 hens for egg production, over 2,500 chickens for meat. Income from egg sales reaches over 1 million dong per day". His chickens are of Lac Thuy local breed of good quality meat, which is researched to maintain & create a source of valuable chicken genes by Ministry of Science & Technology. In order to guarantee the pure breed, he has used the eggs laid by his hens which are then sent to an external incubator. A cycle of meat chicken raising from newly hatched to be sold takes about 4.5 months. Every chicken for meat weighs 2.5 - 3.0 kg and is sold at market prices of 80-100,000đ/kg. It's estimated that he would earn the income of over 200 million from now on till the end of the year.

With years of experiences in chicken raising and technical knowledge learnt from

ADDA-funded activities, in the two recent years, Quy have made no loss in husbandry. He is the leader of a common interest group of 12 farmers who were trained by ADDA project. He & other members of the group are equipped with the skills of doing business, analyzing and capturing market information. Apart from chickens, he also plants Canh oranges on 02 ha. Canh oranges are sold now at 25,000d/kg and it is calculated that his garden would produce 20 tons of fruits which are equivalent to 400 million dong.

Not only hardworking - a typical character of Quy, he also has a capacity of a manager. As a group leader of an interest group on gardening & animal husbandry in the villages of 2C and Bua Cu, Co Nghia commune, he is pro-active and sensitive on the market, actively learning & applying techniques to the production of his own family as well as the group. The model of chicken raising & oranges growing is being applied by many other farmers in Co Nghia commune.



PURPLE BARK SUGAR CANE OF NAU VILLAGE.



Group members are checking sugar cane field

K Nau village, Thu Phong commune, Cao Phong District has very little land area for rice farming, mainly the hill land with gentle slope which accounts for 2/3 of natural land area.

The life of local people in Nau village was difficult 10 years ago. More than half of the village lacked food during the betweencrop period. Main crops are maize and cassava on hill land. The land use efficiency is not high due to inexperienced farming and selection of improper plantation.

In 2007, ADDA project and Provincial Farmers Association launched technical training course on husbandry and cultivation for farmers of Nau village. After the training, many farmers have new perception of farming, resulting in the inter-cropping of new plants and intensive farming for shortterm industrial plants such as purple sugar cane, water melon, green gourd, cucumber, bitter melon, snake gourd, etc.

Sugar cane farming group of Nau village including 16 members was formed in 2008 when Nau famers boldly replaced rice with purple sugar cane on two crop farming land. Thanks to the knowledge gained from the training course, sugar cane grows well with higher quality than that of households who did not attend the training. The first harvest produced high yield, reached good price and the benefit earned was 4 times higher than rice yield on the same land area. This achievement has resulted in increased farming land area from 5000m² in 2008 to 4.8ha. On average, each member has from 2,500m² to 3,000m².

In 2013, the purple sugar cane group was developed into Nau village collaborative group. The collaborative group has been provided with regular training on sugar cane farming techniques. Farmers have been supported with credit for the expansion of farming area. So far, 7 over 16 households have been granted with credit of VND 30 million for sugar cane farming investment.

Due to limited flat farming area, farmers need to make use of hill land with gentle slope for sugar cane cultivation. This solution is also a good one, fitting with the commune's call for soil erosion prevention. Sugar cane on sloping land is grown later and harvested later than that grown on normal flat soil. However, the advantage is that sugar cane on sloping land can be kept fresh longer and have higher economic value.

Ms Bui Thi Xien and Ms Bui Thi Xuyenhas 3000m² of sugar cane farming area with promising productivity. Thanks to favorable weather conditions and little pest attack, sugar cane develops well. One plant is sold at 6,000 VND and Nau farmers are expecting a abundant season of sugar cane.

WHITE SUGAR CANE FARMING



Farmers within white bark sugar cane farming group check their sugar cane on a daily basis.

Cao Phong District, Hoa Binh Province has 150 households amongst which 16 households are joining as a group of sugar cane cultivation. **J**

nifferently from other village in the commune, Nau village farmers have select white sugar cane as the main crop instead of planting orange. This harvest, Nau village has about 9.4 ha of sugar cane and the white sugar cane accounts for 65% of total farming area. The sugar cane farming group has a total of 4.8 ha for sugar cane cultivation but the white sugar cane occupies 3,1 ha. White sugar cane is selected because this variety is suitable for all topological area including sloping land. This variety can adapt to all kinds of soil, requires little care and low investment cost while the purple bark sugar cane require double amount of fertilizer (including chemical fertilizer and muck). Addtionally, the white bark sugar cane can have longer duration as this variety can suffer better from drought.

The household of Ms Duong Thi Sang only cultivates white sugar cane on 4,000 m² while other members such as Bui Thi Xien, Bui Thi Xuyen and Bui Thi Nham cultivate on more than 2,000 m² each. Thanks to the training knowledge, members can grow well with big body and consistent sugar quality. One of the advantage of white bark sugar cane is that it can be sold not only for sugar juice shop but also for sugar cane processing plants. Therefore, farmers are not concerned too much about market and furthermore, this variety can be flexible in harvesting time so the price is not easily squeezed by traders.

According to Ms Nguyen Thi Hong, group leader, the whole group has 5,000 m² white sugar cane farming area, the selling price is ranging from VND 5,000 to 7,000 per tree. For sugar cane grown in recent March and April can be sold next february. The farming of white bark sugar cane does not require much effort but still requires techniques. The training courses of ADDA project have helped farmers to know more about growth features of this variety and define suitable time for high yield. The common practice is that white sugar can is cultivated in March and harvested next January. Labor required for farming white sugar cane is less than that for purple bark variety. Purple variety needs to be debarked once a week and sprayed with chemicals from 2 to 3 times per week while the white one requires one time of leaf removal per month and 2 times of chemical spraying at maximum. White variety normally suffers from diseases that is easily controlled such as whitefly, Puccinia chrysanthemi Roze and ring spot. The income from white variety is almost the same as that of purple one but the price is more stable.

ORANGE GROWING BRINGS BETTER LIFE

Vo village is located in the valley of Thu Phong commune. Having only 4.3 ha of rice growing, and the rest of hill land. This is good for the village to grow orange.

n 2009, a group of farmers having a common interest in growing oranges was formed in Vo village with the support of 03 million dong from ADDA project which was used as rotation loans to members for buying seedlings. Today, the group has total 4 ha planting 2,000 oranges of different kinds.

Ms. Bui Thi Huong has a farm of 200 yellow orange trees which bear fruits for the 2nd time. Every orange tree produces 300 kg of fruits. The farm gate price is 24,000d/ kg and on average, the income from every orange tree is about 700,000 dong onwards

Mr. Bui Van Hoan - village leader replanted his farm with 300 trees of Canh oranges. Canh orange is difficult one but high income, its price is about 45,000dong/kg - the most expensive oranges in Cao Phong



Exuberant orange farm along hill sides

Orange trees has changed Vo village. Many families have income from 200 million to some hundreds of millions dong per year, typically few households earning billion dong from oranges, which farmers in Vo village have never thought of Vo farmers has experienced a number of challenges in order to reap today success. They had to learn intensive techniques, make production plans & find the way to approach potential markets. Many farmers like Mr. Bui Ngoc Thanh - group vice leader, Ms. Bui Thi Thuy, Bui Thi Tho, Bui Thi Nham, Bui Thi Thu, and Mr. Bui Thuy Than wanted to give up because no knowledge & techniques of disease prevention & treatment led to lean harvest. Since the group was formed, its members have participated in 06 training classes on citrus growing techniques organized by ADDA in cooperation with Farmers' Union. Farmers now have technical knowledge of the development & growth stages of oranges, proper use of fertilizers, plant protection substances for good quality oranges.

The collaborative group has collectively purchased seedlings, fertilizers, plant protection chemicals and collectively sold their oranges in order to lower production cost and avoid price squeezing by the traders/ wholesalers. In 2010, the income of one household reached 14.2 million dong which increased to 21.6 million dong in 2014. The village has changed remarkably thanks to orange trees

Success Stories

STRENGTHENING FARMER INTEREST GROUPS AMONG ETHNIC MINORITIES IN NGHE AN PROVINCE AND HOA BINH PROVINCE



Success Stories in Nghean

ADDA has supported the capacity building of the groups of farmers raising chickens, cows, pigs, deer, and growing green gourds, etc. In the districts of Tan Ky, Quy Hop, Nghia Dan.



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GREEN GOURD PRODUCTION IN NGHIA LOC



Mr. Phan Van Hiep is preparing soil for coming season of gourds

Mr. Le Van Khuong is growing the most qourds areen in the ha. group. With 02 his over family has earned the profit of 100 million dong/ a crop of green gourd. After his own success, he mobilized other farmers in his village to grow green gourd. 77

Being supported by ADDA project, the group with 09 members were trained on techniques, how to select seeds and look for markets. After 09 months, the group had the profit of 30 million dong from 10 sao of green gourd. The group also has lent the households having difficult living conditions by lending them to buy seeds and fertilizers. To repay for their efforts, Hai Loc farmers happily earned the profit of 20 million/sao after three months, which farmers have never got from other crops.

Mr. Phan Van Hiep & Mrs. Nguyen Thi Nhung are typical examples. They planted green gourd on 2.5 sao this autumn crop and after 80 days, they got the profit of 35 million dong excluding production cost.

Compared to other crops, green gourd could be preserved for longer time and selling prices of 5,000 - 7,000d/kg. When the price of green gourd went down, to avoid price squeezing by the wholesalers, the group agreed not to sell gourds but store them properly for one month while looking for better markets. According to members, thanks to the strong cohesion among the group, there has had no loss crop since they started growing gourds three years ago. Mr. Le Van Khuong said "we are determined that producing gourds is to make profit and not to suffer the situation of low prices in bumper season. In order to make it, in addtion to the strong unity within the group, mutual support in terms of techniques and capitals, it also requires the sensitiveness to the market and to know when the good time to plant gourds because there is big difference in the price of gourds which are harvested in different time about 5-7 days". The success of gourd production has created a opportunity for changing crop structures, increasing income of Hai Loc farmers. Mr. Vo Quang Hoa - Chairman of Nghi Dan District Farmers' Union shared: "this is a lesson on the strong cohesion/ of the group which enables the farmers to mutually support during production. Farmers' Union organized the visits to this model for other communes & towns for the purpose of upscaling the production & market of green gourds in the village of Hai Loc, Nghia Loc commune.

THE OWNER OF PIG FARM



He also learns pig farming techniques from training materials provided by ADDA

What is your family's life?

Our family has lived on cultivating rice, maize, potato and working for others but we could not earn enough for feeding 6 children

Did you, therefore, start raising pig for poverty escape?

Yes. I had no capital and was afraid of taking risk; therefore, I had raised 3-5 pigs of the first litter which was then increased to 5-7 pigs/ litter after making profit. In 2010, our village had changed thanks to ADDA project implemented by Nghia Dan District Farmers' Union. The project supported the formation of common interest groups and provided technical training to farmer groups on how to raise pigs. My family borrowed 20 million dong from the group fund. We learnt step by step to become knowledgeable pig raiser

And you have boldly stepped forward?

Yes, thanks to technical training & experience sharing sessions, I was bold enough to invest in buying more piglets and improving the piggery. In 2012, our family borrowed more money to expand the scale of pig farming to 120-150 pigs for fattening.

11 In the village 18, Nghia Trung commune, Nghia Dan, Mr. Nguyen Quang Huy is called a pig raising hero

What is your daily working routine?

Our pig farm is 1 km far from the residential area, thus I go to "office" every day. I have a pig farming dairy in which the growth of every pig is recorded. Additionally, piggery hygiene, pig diet, the weight of every pig and the amount of feed for an individual pig are observed regularly for timely finding issues & solutions to pig diseases, which I learnt from technical training courses for the group

What is your income?

From 300 to 500 million dong/year which I have saved for sending our two elder sons to Japan for working and for paying the schooling of 04 other kids

Did raising pigs help you bring up 06 children?

I often make jokes that pigs are my assets. Thanks to pig farming, I have reared 06 children. I am happy that our family was granted with a certificate of merit by Provincial Farmers' Union & Provincial Farms' Club

What is your expectation in coming time?

I expect that I would be able to make the breeding on my own for producing piglets to self-supply my farm & other farms. And I also would like to borrow more money for pig farm expansion.

GOOD EXAMPLES IN HOA VINH SON

16 pig raisers in Hoa Vinh Son village escaped from poverty thanks to Cooperative-modeled pig farming.

n 2012, thanks to ADDA support, a group of pig raising farmers was formed in Hoa Vinh Son village. Since its formation, group members were trained on techniques of pig raising. Additionally, had opportunities to exchange experience, develop raising plan and look for buyers. As a result, pigs have less disease, grows faster. There are 300 pigs for sales every litter.

The pig market has been changing a lot but people in Hoa Vinh Son village, Nghia Hoi commune, Nghia Dan are still "loyal" to pig farming. A group credit fund was developed for lending households with difficult living conditions

The family of Mr. Cao Xuan Danh is a typical example of Hoa Vinh Son group. His family has 2 members at labour age. Apart from rice & sugar cane, he has raised 15 pigs and every three months his family has 15-20 pigs for sales

Mr. Cao Xuan Hoa - a group member has been raising about 50 pigs. With strong willingness to learn, he once went to Hai Duong province to find good piglets. His farrow of pigs is now expanding, helping him



Thanks to compliance with guidelines in feed mixture, the pig farrow of Mr. Cao Xuan Danh in Hoa Vinh Son village, Nghia Hoi commune has grown fast and been better resistant to diseases.

have more profits to develop milling service

Currently, in Hoa Vinh Son village, there are 500 fattened pigs of which 300 pigs are owned by 16 members of the collaborative group. Mr. Vo Quang Hoa - chairman of Nghia Dan district Farmers' Union said: the development of common interest groups in the field of animal husbandry has created opportunities for members to learn and exchange the issues of farming techniques, disease prevention and market searching. With this model, more services such as milling, breeding, feed supplying, etc. have been developed, which contribute to the improvement in people's life. A few households have combined pig raising and biogas development in order to supply itself gas and reduce pollution.

FAT AND GORGEOUS COWS IN NGHIA HOAN.

Cow raising group in Tham hamlet of Nghia Hoan Commune of Tan Ky District has been successful in rearing fat and gorgeous cows. **??**

Prior to the establishment of cow raising group, very few households in Tham hamlet invested into building proper livestock or in case of there being breeding facilities, they were simple. Farmers did not know feed processing methods, failed to give preventive injection for cattle and did not have proper raising techniques, leading to slow growth and low economic values.

In 2012, under the assistance of ADDA project, communal farmers union established a raising group for Tham hamlet. Mr. Hoang Ba Luyen, group leader said "with more than 8 ha of acacia and 1 ha of grass cultivation, this is one favorable condition for him to invest into cow raising. Now his household has 10 cows and generates a yearly income of VND 300 million.

In his cow raising record book, Mr Hoang Ba Luyen wrote: "ADDA project has trained farmers about the preventive and control measures against diseases for cows, grass cultivating techniques and we feel motivated. Members all group feel very happy when their family economic conditions have been improved. Before many households were not able to own a cow but now the situation has changed any household owns at least 1 cow or as many as 8 to 10 cows".

So far the group has 10 households participating with more than 37 hybrid cows. The group subsidized 30 million at maximum for its members to borrow for cow farming. Farmers have been successfully applying training knowledge on fattening beef cows, grass cultivation, cleaning of livestock, feeding and preventive measures against diseases. Especially, the group leader has been guided about organizing periodical and ad hoc meetings to review on group performance on a quarterly basis and to make plan for the upcoming quarter. Every year, the project studies and records data for analysis and assessment from members of the group or outside the group to make comparison among households. It is obvious that cow raising becomes more efficient.

The household of Ms Ta Thi Chien are raising 2 cows. She used to follow traditional methods of raising, causing slow growth and tendency of disease occurrence for cows. After joining in this group, she becomes successful. All he cows are gorgeous and have a good look.

Mr. Thai Khac Ngoc - chairman of Tan Ky District Farmers Association affirmed "joint efforts in cow raising group has been able to rear strong and fat cows. There is nothing more joyful when cow raising is successful in this area".



Related responsible agencies are checking the growth of cows of Mr. Luyen.

CHICKENS - CONNECTING COMMUNITIES

C Raising chickens in groups not only generates high income, contributing to hanger eradication and poverty reduction for hamlet 1, Tan Huong Commune of Tan Ky District but also connects local people in the community.



Ms Le Thi Tho is happy with her healthy and strong batch of chickens.

A amlet 1 of Tan Huong Commune, Tan Ky District is merely an agricultural hamlet where local people depend on self- employment with tedious life and are concerned about material life. Farmers Union of the District and ADDA project has investigated about the need of animal husbandryinhamlet1 and chicken is selected to be the target for hunger eradication and poverty reduction. This initiative was much supported and appreciated by residents.

Established in 2012, the group has now 12 members. Households attended in many training courses and organized as a croup for their raising activities. On a monthly basis, the group holds a meeting for members to share experience and to call for mutual support about breeding and seeking consumption market. Therefore, more job has been generated and income has been increased.

Mr. Le Sy Thinh, Head of the group said "over the past 3 years, chicken raising has resulted many benefits for farmers and members have been supporting each other to share knowledge and experience to avoid risks and to increase efficiency and the community bond and finally to change of face of rural area".

The household of Ms. Le Thi Tho is the first pioneer in applying techniques from the training courses successfully. She is brave to expand farming scale from 200 chickens to 1,200 chickens per year. After selling and deducting expenses, the income will be VND 100 million. She shared with joy "before I did not dare to raise chickens, I did not even have any idea of how the preventive injection for chickens was. After training, I was confident to be a vet "at home". We are now going to sell another batch of chickens with a promising source of income"

According to experience of chicken farmers in hamlet 1 of Tan Huong commune, when all farmers connect together, the output products will be consistent with the stable price on to the market. In addition to Mr. Thinh and Ms Tho. other members are also expanding their farming scale from 500 chickens to 1000 chickens per batch. When chickens are ready for selling, households can have been able to approach successfully the consumption market inside and outside the district. By this way, the squeezing of the price by traders is constrained. Chicken raising has helped many households in hamlet 1 to escape from poverty and to have more income for their children.

REPRODUCTIVE COWS IN GIAI XUAN



Mr. Truong Van Pham is feeding his cow and buffalo as his precious treasures.

Reproductive cow raising group of Xuan Tien hamlet, Giai Xuan Commune of Tan Kv District years has been through 3 of formulation development. and Cows have become a symbol that is closely related to local people's life. **77**

At present, the group has 14 participating farmer households with a herd of 20 cows. Mr. Ngo Sy Ha - Group leader said "I am the group leader and regularly trained on effective management of group activities, investment methods and fund mobilization, pricing/cost analysis from the raising phase to the selling phase, marketing, etc and after that I am supposed to transfer back to members. We often organize meetings to share experience in husbandry, variety cow selection and reproductive performance".

One of the features for all groups in Xuan Tien hamlet is that members within the group contribute to a group fund for lending for production and husbandry development. In the cow raising group of Giai Xuan commune, each member contributes VND 200,000 per year and the total fund reaches VND 22 million which is lent to difficult members for their farming activities. For example, the household of Truong Van Pham is given the credit for raising cows and he has 3 cows and 1 buffalo. The model brings back good results and his family has escaped poverty.

The household of Ms Vu Thi Toan is developing husbandry. Her family has 3 cows including 1 male cow and 2 female cows with the weight of more than 100 kg each. Each year, two calves are produced for selling with the income of more than VND 30 million. Ms Toan said that cows are our asset to be kept in the house.

Mr. Nguyen Van Viet - Chairman of Giai Xuan commune Farmers Association affirmed that "ADDA project does not support farmers about the knowledge in husbandry techniques but also help to build facilities for the community. Group members also support and guide each other in production and help each other under challenging period of time. As a result, members have had better income, escaped poverty and contributed to the development of the society".

DEER RAISING FARMERS

G Bac Son hamlet of Tam Hiep Commune, Quy Hop District has 224 households with 1,076 people. Most of inhabitants this area mostlv come from **Ouvnh** Luu District with their traditional iob being deer farming. Many farmers become well off thanks to deer raising.



Mr. Ho Vinh Thuy is feeding deer.

Deer raising in Bac Son village has gone through many ups and downs with its most prosperous phase dated in 1991, known as "prosperous" stage of this work. Each deer was worth a lot of gold ounces and then slipped down the price when "deer meat is even cheaper than pork". However, local people have been very faithful to their traditional breeding, making this auxiliary job to become a critical one generating main source of income for many households.

Deer is easy to cultivate and tends to be insensitive to diseases and epidemic. Feed is mainly from by- products of agricultural cultivation. Therefore, it is very cost effective and results in high economic values. Each deer consumes only 5 kgs of grass or leaves such as china berry leaves, jackfruit leaves, fig tree leaves and any kind of fruits and vegetables. When deer is going to be in the phase of velvet reaping, additional nutrition should be supplied by feeding maize, ground nuts and beans. The old in the hamlet maintain this breeding, not only for its high economic values but also for entertainment.

Mr. Hoang Duy Trinh, the senior deer farmer of Bac Son village has just been

appointed to be the group leader said that there are now 9 members from initial count of 4 members. This is a "jump" to maintain and promote deer farming for further expansion. Regarding the economic benefits of this deer breeding, Mr. Trinh shared that a pair of deer could generate around 30 million from selling velvets and breeder.

At present, 46 households of Bac Son hamlet are maintaining deer raising with a total of 96 deer. Typical households with more deer than others include Mr. Ho Huu Dia, Bui Huy Tien and Ho Van Bao with 6 deer each. Other households raise from 1 to 4 deer each. Total income for the whole hamlet from deer rearing of Bac Son hamlet is about VND 150 million.

Mr. Ho Vinh Thuy, head of Bac Son hamlet said that with the sponsor of 4 female deer and one feed cutting machine from ADDA project, I strongly believe that deer breeding will expanse and grow in the upcoming years.

Currently, the number of well - off households account for 53% while families with average income and poverty remain at 27% and 9.6% respectively. The village has met criteria for new rural development model of Tam Hop commune.

PIGS IN MON HAMLET



Representatives of Farmers Association of Chau Quang Commune are visiting the model of Ms. Vi Thu Xuan in Mon hamlet.

The group leader Ms Le Thi Thinh and its members in Mon hamlet of Chau Quang commune, Quy Hop District have shared with us about the story of raising pigs in Mon hamlet.

How the pig raising group of Mon hamlet was born?

Group leader Le Thi Thinh: Mon hamlet was very poor. By then, pigs were raised traditionally, causing low yield. In June 2010, farmers of Thai Ethnic established a group of pig raising with the wish of poverty escape.

What are the benefits of pig raising as a group?

Group leader Le Thi Thinh: Farmers are organized as a group with its own regulations. Also, they are trained and supported with loan for farming. At present, the group fund mobilized is VND 20 million. The fund is for supporting farmers in their farming activities and visiting other effective models. Before, families close within their geographical area without discussion or sharing of knowledge or experience in husbandry; however, members of the group have offered more supportive activities by sharing and learning to minimize risks and increase economic efficiency.

How can raising by group lower cost?

Group leader Le Thi Thinh: Because households can make the best use of food at home such as maize, cassava and auxiliary products from beans, wine processing, brewery, etc. In addition to meat pig raising, members also raise reproductive pigs. This is a collective activity; therefore, members can buy variety pig and sell their grown pigs at the same price, avoiding the squeezing of price from traders.

What is the income of households?

Group leader Le Thi Thinh: Yearly income reaches VND 30 million per person. The group does not have poor household.

Ms. Vi Thị Hong, group member

"With the subsidy of 4 million from the project, I bought 2 reproductive pigs which gave birth to 21 small pigs amongst which 10 were kept for raising while other 11 pigs are sold to other members for raising. At present, I have 10 meat pigs, 2 reproductive pigs and 6 young pigs".

Ms Vi Thi Xuân, group member.

"All expenses in my family, I have to rely on pigs. A batch of 10 pigs, I have income of 20 million Dong in which the net income is VND 10 million".

Ms Lo Thị Lien, deputy group leader.

"Before, one family raises from 1 to 2 pigs. Since the group was established, members start to raise about 15-20 pigs. We are trained about farming techniques and disease prevention for pigs. Now, there are no poor households".

Mr. Luong Cong Hoang, Standing member of farmers Association of Chau Quang Commune.

"The group organizes their activities by themselves by producing consistent quality variety and clean pigs. This model is actually very effective. We encourage this model to be developed and duplicate".

PIG FARMING IN COC MAN VILLAGE



Mr. Truong Van Duong flushes his pigs every day

Following the introduction by Mr. Ngo Quoc Khue - the chairman of Tho Hop communal farmerse union, we travelled a long distance and crossed a swinging bamboo bridge over Dinh river to visit the effective pig raising model in Coc Mam village.

The pig raising common interest group of 14 members was formed in 2009. Each group member contributes 100,000 dong/year to the group fund for the organization of group meetings once every quarter. Having joined the group, farmers have had opportunities to learn & share the experiences in preventing pigs from diseases and building proper piggeries, to participate in training courses organized by Farmers' Unions at different levels and to be supported if the raising faces risks. Thus, the group have become cohesive & the pig farming in Coc Mam village has been developing.

There are 100 households raising pigs

with the total number of 426 pigs one third of which is owned the common interest group's members. Every year, on average, the common interest group produces 3-4 litters of pigs and sells 130-150 pigs each litter. The swine for sale reach 7 tons/litter, selling prices are within 40,000-45,000dong/ kg, resulting in total revenue of about 900 million dong/year

The households of Mr. Truong Van Duong, Mrs. Truong Thi Oanh, Mr. Truong Minh Tien have earned high income from pig raising. Mr. Truong Van Duong happily said "after having good piggery built, I have raised 20-30 pigs for fattening on average per litter. Additionally, our family also has raised 02 sows for producing piglets. Every litter, over 03 tons of fattened pigs are produced and the revenue reachs about 120 million dong, 40 million dong of which is net profit.

Benefits from pig farming has brought the group member closer together in order to find market for their products, avoid the fact that wholesalers decided and lowered the prices. The group leader, Mr. Truong Minh Tien said: with the average revenue of 900 million dong every year, 14 members have better-off living conditions, contributing to reduce the number of poor households in Coc Mam village to 18 households/134 households. It was happy that the group had recently supported a feed processing machine which costs 14 million dong by a ADDA funded project. We, our group, expect to have more capitals to expand our business effectively.

XUAN LOI VILLAGE AND CAGED COW

The household of Mr. Truong Huu Hoach in Xuan Loi villafe of Van Loi Commune is one of the first families to participate in caged cow raising.

le farms 10 Saos of Elephant Grass and has owned a feed pellet machine for his own caged cow raising for 8 years. In 2009, under the special attention of Farmers' Association of all levels and ADDA project. Xuan Loi village established its own cow raising group named "Dai Loi - Big Victory" and Mr Hoach's household voluntarily joined this group. Since joining this group, he has had a variety of opportunities to attend various training courses on farming techniques on methods of rearing, disease prevention and control and he exposed himself to the group meeting held every 3 months together with other group members to share lessons learned. According to his information, he currently has from 4 to 6 cows including 2 female cows and 1 male cow. On a yearly basis, the two female cows gave birth to 2 calves. After one year of rearing, calves are sold on to the market at the price of from 20 to 30 million Dong each.

Similar to Mr. Hoach, the family of Mr. Nguyen Thanh Son also joined the project in 2009. With his family's advantage of big land area for breeding facilities and elephant grass farming, he was able to purchase a calf of 9 million dong on his own. He has now 9 cows from only one cow at the first time. His family has sold 6 and retained only 2 female cows and 1 calf.

Cow raising group of Xuan Loi village has 9 members. Each household raises an average of 2 to 4 cows. In order to sufficiently supply grass, households have focused on farming elephant grass with an average of 6 to 8 Saos per household. In addition to the main source of feed being grass, other auxiliary agricultural products such as banana, rice bran, corn bran, etc to be used as feed, leading to lower investment cost. Average yearly income for each household is 30-50 million Dong. In 2009, 4 member households were categorized as "poor" and the situation has changed now when 6 amongst 9 households are classified as relatively well-off and the remaining 3 households are grouped as "average".

Mr. Vo Van Thu, cow raising group leader also confirmed that each member within the group had to contribute about 2 million Dong for shared fund to maintain this activity and replicate breeding, to pay visit to sick or victim members. In addition, members purchase feed pellet machine and coordinate with one another to find a solution for consumption and selling price squeeze.

At present, members wish to raise up to from 3 to 5 female cows and 1 male cow as breeding. Farmers are expecting to receive support from authorities to expanse the source of credits and to replicate the model.



Grass pellet machine of Mr. Truong Huu Hoanh household



ABOUT US

ADDA (Agricultural Development Denmark Asia) is a Danish NGO founded in March 1994 in order to meet the need for development, emphasis being placed on Agricultural education in Southeast Asia (Vietnam and Cambodia). ADDA has been working in Vietnam since March, 1999. Since 2009 ADDA has also been active in East-Africa (Tanzania).

ADDA consists of members from a broad section of the Danish population, both teaching and advisory institutions, associations, private agro-industrial companies, and individuals with an interest in Danish development work, focusing on agriculture in Southeast Asia.

ADDA aims to assist with improving the level of self-sufficiency for the poorest parts of the Southeast Asian rural population, among others returned refugees.

ADDA wishes to achieve this major objective by establishing long lasting contacts and co-operation with local NGOs in Southeast Asia and other Developing countries. The professional capacity of ADDA covers experience within agricultural consultancy, education, research, practical farming, language education, administration and management.

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