

## CASE STUDIES ON SUCCESSFUL, LIMITED SUCCESSFUL AND UNSUCCESSFUL FARMERS IN AGRICULTURAL DIVERSIFICATION IN O MON DISTRICT, CAN THO PROVINCE, MEKONG DELTA, SOUTH VIETNAM.

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### ABSTRACT

*Case studies of farmers who were successful, limited successful or unsuccessful in agricultural diversification in Thoi Long village, O Mon District, Can Tho Province indicated that diversification was not always successful because of the risks faced. It also depends on the conditions of individual farm households. The farmers who were successful had clearly improved family life. On the other hand, the unsuccessful farm households faced worse living conditions. The successful farm household had, among other things, constructed a new house and their quality life was clearly improved. They feel happy and free due to better incomes from their agricultural diversification activities. The limited successful farmers, experiencing no major change from diversification, felt that life in general had not changed. The situation for the unsuccessful diversification household was difficult, however. Despite failure or success, however, farmers faced problems in the different components of agricultural diversification. A major task for the extension service, and for research, should be to address the issues related to the impact of diversification for different types of households. The ambition should be to design and select appropriate models, with sufficient policy support, to help farmers overcome the problems and risks linked to diversification.*

**Key words:** agricultural diversification, successful, impact

### INTRODUCTION

Agricultural diversification is an important mechanism for economic growth. Agricultural diversification can be facilitated by technology development, changes in consumer demand, government policy or in trade arrangements, and by development of irrigation facilities, roads, and other types of infrastructure. Agricultural diversification can reduce risks in agriculture and generate more stable household incomes within different farm enterprises. However, it depends on opportunities for diversification and on farmers' responsiveness to opportunities. It can be impeded by risks in markets and prices and in crop-management practices, by degradation of natural resources, and by conflicting socio-economic requirements (Singh et al., 2002). Thus, agricultural diversification is not always successful. Many farmers fail in their

diversification endeavors. In order to gain a broader understanding of the situation facing Vietnamese farmers in diversification, and to give more tangible descriptions of the outcome of different diversification efforts, this paper comprise of case studies presenting a successful farm household, a limited successful household and an unsuccessful household.<sup>1</sup>

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<sup>1</sup> The study forms part of larger study on agricultural diversification, a collaborative project between researchers from Lund University, Sweden and Cuu Long Rice Research Institute, Can Tho, Vietnam. The project entitled: *Agricultural Diversification in Vietnam – changes at the farm level in the Mekong and Red River Deltas* is a long-term project that is built on following a panel of respondents for a longer period. The main project is presently being reported parallel to the presentation of a number of sub-studies from the project.

## INFORMATION/DATA COLLECTIONS

The information for the paper, which comprises of qualitative descriptions of the situation in different types of households, was gathered in 2007 through informal discussion with selected farmers. Three kinds of farm households were selected with the help of village and hamlet leaders, viz. farmers who are successful, farmers that have not experienced any major changes (limited successful), and farmers that have failed in their agricultural diversification in Thoi Long village (O Mon District, Can Tho Province). Three different farm households, representing a successful, a limited successful and an unsuccessful household in terms of agricultural diversification in the village were selected for case studies. Information was collected through interviews, based on a pre-determined interview guide, with the purpose to gather as much as information as possible on the situation of the different households.

## RESULTS AND DISCUSSION

### 1. Successful diversification farm household in Thoi Long village

The house of the successful farmer is at the end of the path. The path is narrow (1.5 m). It is an earth path that runs along the canal. The male head of the household was 65 years old and he did not remember his level of educational achievement – i.e. which grade he did reach in school. He knows how to read and write. His wife was 57 years old. She was illiterate as her mother died when she was 2 years old and no one took care of her schooling. The son living in the house was 27 years old and has studied up to grade 2. The son's wife age was equal to his and she has studied up to grade 5. Altogether there are 5 persons in the household – husband, wife, son, daughter in law and one male grandson. The husband and wife have 6 children, but only one son is married and living with them. The other sons and daughters are all married and live separately.

The household's model of diversification was Rice + Fish + Pig. This model was successful and they were able to build the present house with brick walls and metal roof in 2005. The ground has been paved with enameled tiles. They had one motorcycle, two bicycles, one color television, one

radio, two electric fans, one DVD player, and one 4 horse-powers water pump. There are one side-board, one wood-cabinet for ancestor worship, two wooden beds and tables in the sitting room.

Surrounding the house are mango, jackfruit, banana, and coconut trees planted on 2,100 m<sup>2</sup>. The household earns about two million Vietnamese Dongs from fruit trees each year. They have a fish pond of 500 m<sup>2</sup> just behind the house. This is used to raise fingerlings and earns the household about 18 million Vietnamese Dongs per year. Next to the fish pond is the rice field. They have 4,800 m<sup>2</sup> of rice field and plant three rice crops per year. The total income from rice is about 17.2 million Vietnamese Dongs per year (7 million from the dry season, 6 million from the wet season and 4.2 million from the middle season). In the wet season, they release fish in the rice field and earn an additional 6 million Vietnamese Dongs per year from this diversification activity. The fish in the rice field comprise of carp, silver carp and tench bream (*Hypophthalmichthys*). They rear 10 pigs generating a total income of 16 million Dongs, which gives a net return from pig raising of four million Dongs.

The household's farming calendar is structured as presented below:

#### *Dry season rice:*

Sowing in October of the lunar calendar – harvesting in January of the lunar calendar

(# Sowing in November of the solar calendar – harvesting in February of the solar calendar)

#### *Middle season rice:*

Sowing in January of the lunar calendar – harvesting in April of the lunar calendar

(# Sowing in February of the solar calendar – harvesting in May of the solar calendar)

#### *Wet season rice:*

Sowing in May of the lunar calendar – harvesting in August of the lunar calendar

(# Sowing in June of the solar calendar – harvesting in September of the solar calendar)

***Fish raised in the rice field:***

Releasing fingerlings in May of the lunar calendar – harvesting in October of the lunar calendar

(# Releasing fingerlings in June of the solar calendar – harvesting in November of the solar calendar)

**Problems in diversification identified by the successful farm household:**

The successful farmer learned about diversification and agricultural technologies from the neighbors. The husband and wife of the household did not experience any major problems in diversification. They claimed that they worked more and had more money. The initial shortage of capital was solved by getting a loan from the bank. In 2006 they got a loan of six million Dongs from the bank. In 2007 they got a 10 million Vietnamese Dongs loan from the bank with duration of one year. Every third month they paid interest of 368,000 Dongs on the loan.

The fertility of the soil, which is alluvial, was evaluated as good by the farmer. It was classified as Type 3 by the government. The land is located near the canal and, thus, the soil was described as “*dat bien*” (“*Dat*” means soil and “*bien*” is the flood land, or the edge of the river/canal). After the flooding period (during September and October), silt is deposited on the field surface with a thickness of about 4 cm. The silt deposited improves the rice yield, and after flooding the farmers plant dry season rice. Yield in the dry season is about six tons/ha, while it is about three tons/ha in the wet season and about three point four tons/ha in the middle season.

The value of the land is high – as the farmers describe it: there are 5 gold trees per 1 big cong of rice land (1 big cong = 1,300 m<sup>2</sup> and 1 gold tree = 1.6 million Dongs; 1 gold tree is equal to 37 grams of gold). They plan to buy some more land if they can save more money. Each time they can afford it they will buy 1 big cong of land.

There were problems in rearing pigs, particularly with respect to the variation in the price of pigs. When the price goes up at the time of selling they will get high net return, while at other times with stagnant or sinking prices the net return is lower.

Rice production was a burden in terms of caring for the crop, harvesting, bundling, and hauling. Most of the activities in rice production were done through family labor. However, due to their large rice acreage they lacked of family labor and had to hire labor at a high cost – 50,000 Dongs for a man-day and 40,000 for a women-day).

**Impact of diversification on livelihoods and changing life styles**

An important motive to diversify was the desire to improve the livelihoods and the diet of the family. Livestock, including fish, was essential for livelihood and technological innovations in the cultivation of rice and fruits and in the breeding of fish were essential for change (Bosma, 2005). The household have reared fish since 2003 and since this time the family wealth has been improved. The raising of pigs was started a long time ago. As a result of better incomes from their economic activities they have changed from standard food and clothing to the better ones. A temporal comparison between the household’s earlier situations with its present situation is given in Table 1.

**Table 1:** Changes in livelihood and life styles of the successful farm household

| Before                                                                                                                                                                                       | Now                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Rice + Pigs                                                                                                                                                                                  | Rice + Fish + Pigs                                                                                             |
| Could not save money – the money was just enough for daily food, medicine costs and social events                                                                                            | Can save money                                                                                                 |
| Temporary house: thatched roof and walls. They did not have television, motorcycle and bicycle. The children had no bicycle to go to school on and, thus, they only studied up to grade 5 of | Semi-permanent house: brick wall and metal roof. They find life more convenient these days, as described above |

| Before                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Now                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rice + Pigs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Rice + Fish + Pigs                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| primary school. The secondary school was far away and they did not have the means for letting their children go there                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Household members' activities:<br><i>Husband</i> – rice farming, planting upland crops such as melon, pumpkin and corn on the rice bunds<br><i>Children</i> – rice cutting, netting fish in the canal and river<br><i>Wife</i> – rice farming, raising pigs, helping the husband in hand weeding and gap filling on the rice field                                                                                                                                                                         | Household members' activities:<br><i>Husband</i> – rice farming<br><i>Son</i> – netting fish in the canal and river and netting fish on other farms as hired labor; fertilizer and pesticide application<br><i>Daughter in-law</i> – worker in frozen-food factory<br><i>Wife</i> – rearing pigs and fish.<br><br><i>Who contributes most in different activities:</i><br>Rice: Husband > wife<br>Pig: Wife > husband<br>Fish: Wife > husband<br>Hired labor: Son<br>Worker: Daughter in-law |
| <i>Food:</i> The stomach was not full often and the family seldom ate meat; vegetables were collected from the rice field; went to the market only every third month to buy other vegetables than the ones from rice field; seldom bought fish; fish was caught from canals and the rice field.<br><i>Drinking water:</i> Water collected from the canal was purified by alum.<br><i>Drinking alcohol:</i> During social events such as memorials over deceased relatives', birth days, and other parties. | <i>Food:</i> Eat meat such as chicken, fish, pork and various vegetables regularly; goes to the market, which is 2 km from the house, every week.<br><i>Drinking water:</i> Collect from the well.<br><i>Drinking beer and soft drinks:</i> During social events such as memorials over deceased relatives', birth days, and other parties.                                                                                                                                                  |
| <i>Taking care themselves:</i> Wore patched clothes – each person had one new suit of clothes every 3-4 years. The wife had long hair and she cared about her hair herself. Less time to rest and no time to nap. Woke up at 3 am to go and sell natural fish caught from the canal and fields, went to sleep at 10 pm.                                                                                                                                                                                    | <i>Taking care themselves:</i> Each person has 10 new suits of clothes every year. The wife gets her hair cut and curled at a saloon. Have made arrangement to rest two hours around noon time. Go to sleep at 8 pm after watching the news on television and wake up at 5 am.                                                                                                                                                                                                               |
| <i>Visits to relatives and old parents</i> – was not able to visit often. Visited less than one time every year because of lacking funds for transportation.                                                                                                                                                                                                                                                                                                                                               | <i>Visits to relatives and old parents</i> – the wife visits the mother in-law every month and gives her money and rice.                                                                                                                                                                                                                                                                                                                                                                     |
| <i>Happiness:</i> The husband and wife were frequently in disagreements with one another due to economic shortages.                                                                                                                                                                                                                                                                                                                                                                                        | <i>Happiness:</i> Now they feel free and happy. The husband and wife rarely quarrel. Now, they should have been able to invest in their children's' studies up to university. Their children, however, are grown up and married and instead they hope their grand children will go on studying and reach university.                                                                                                                                                                         |
| <i>Community:</i> All households were very poor and                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <i>Community:</i> Many farmers in the surrounding                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Before                                                       | Now                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rice + Pigs                                                  | Rice + Fish + Pigs                                                                                                                                                                                                                                                                     |
| there were many thieves so everyone felt a lack of security. | area raise fish. The area is peaceful, secure and there are no thieves around. There are good relationships between neighbors, especially at fish harvest time. People are very happy at fish harvest time. There is no problem and people have to work hard to earn for the families. |



House of successful farmer in Thoi Long village



Wife and things in the sitting room of successful farmers in Thoi Long



Husband and wife of successful farmer in Thoi Long village



Fish pond, banana and mango on the bunds of successful farmer in Thoi Long

## 2. Limited successful diversification farm household in Thoi Long village

The husband in the household having limited success in their diversification efforts was 50 years old and studied to grade 4. His wife was also 50 years old and studied up until grade 5. There were 7 persons living in the household - the 28 years old

son who studied up until grade 6; the 26 years old son and the 24 years old son who both also studied up until grade 6; the 20 years old son who is studying in grade 12 and the 24 years old daughter in-law who studied up to grade 6. The children and the daughter in-law were seen as family labors. The husband and wife were mainly engaged in rice and fish production. The first son focused on rice

and vegetable production – vegetables such as cucumber, green-pumpkin planted on the bunds of the rice field. The second son helped in rice, fish and vegetable production. The third son did fish production while the daughter-in-law was mainly

engaged in taking care of food-preparation in the house. Information on the use and contribution of family labor in different activities are presented in Table 2.

**Table 2:** Family labor distribution

| Item                   | Who contributes most in different activities                                                                                                                                                                                 |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rice                   | Son > husband > wife<br>The husband functions as the manager and instructs the son on agricultural matters – e.g. when to spray pesticide and when to irrigate.<br>Wife does hand weeding and gap filling in the rice field. |
| Fish in the rice field | Husband > wife > son                                                                                                                                                                                                         |
| Fish in pond           | Son > husband > wife                                                                                                                                                                                                         |
| Vegetables             | Son > (husband or wife)                                                                                                                                                                                                      |

The house, which is semi-permanent with brick walls and tiled roof, was built 13 years ago. The ground is paved with thin red bricks. The size of the house is 5m x 10m – 50 m<sup>2</sup>. The family has one color television, one DVD player, one 6 horse-powers water pump, two motorcycles, one bicycle, one mirrored-wardrobe, one ordinary wardrobe and one wood-cabinet for ancestor worship.

They have a fish pond, a rice field, fish in the rice field, and vegetables such as cucumber and squash planted on the rice bunds. Around the house is 1,000 m<sup>2</sup> planted with coconuts. A few chickens are raised, mainly for home consumption. Fish has been raised since three years ago. Catfish is raised in the 6,000 m<sup>2</sup> fish pond. Fish in the pond is harvested three times a year. At each fish harvest the total amount generated from the sale is about

50-60 million Vietnamese Dongs, and the net return is about 20 million Dongs.

The household's rice area is 9,100 m<sup>2</sup>. On this area a kind of triple rice system is practiced included Rice in the dry season; Rice in the middle season and Rice + Fish in the wet season. Fish raised in the rice field in the wet season comprises of carp, silver carp and tench bream (*hypophthalmichthys*). The household earns about 10 million Vietnamese Dongs per year from their fish/rice production. The household's rice incomes are about 23-24 million Dongs per year –the total cost is 8-9 million Dongs and the net return is 15 million Dongs.

Rice yields from the household's rice area are presented in Table 3. Rice yields were largely similar to the yields found on other farms in the area.

**Table 3:** Rice yield

| Rice crop season | Gia/ big cong | Tons/ha in equivalence |
|------------------|---------------|------------------------|
| Dry season       | 50            | 7.69                   |
| Middle season    | 25            | 3.85                   |
| Wet season       | 22            | 3.38                   |

Note: 1 gia = 20 kg; 1 big cong = 1300 m<sup>2</sup>

As a part of the household's economic activities vegetables are produced on the bunds of the rice area. The benefits from the vegetable cultivation are claimed to be:

- Earn money for daily spending – harvesting vegetables two times per year can generate two million Dongs.
- The household does not need to buy vegetables from the market.

Also, according to the household, rice cultivation is more secure than fish production. Raising fish is compared to playing chess because they feel they are always worrying – the outcome is dependent on good luck.

The money raised from selling rice is mainly used for:

- Daily food needs.
- Paying off debts due to the buying of pesticide and fertilizer on credit.
- Invest for the following rice season
- Social events as dead anniversary, birth day, wedding parties, ... (about 1 million dong per month)
- Motorcycles were bought by using money from selling rice

The money raised from selling fish is mainly used for:

- Daily food needs.
- Investments for the next fish production season.
- Investments in the children's education-
- The buying of medicine.

**Problems in diversification identified by the limited successful farm household:**

*Lack of capital* – they had to get loan of 5 million Dongs from the bank to be paid back after the rice harvest. They also borrowed money from the daughter who is married and lives separately.

*Lack of labor* for rice threshing and they had to hire labors for this task. All other tasks were done by family labor.

*Soil*, however, is not a problem because the land is located near to the canal, soil is good and water supplies are sufficient.

*Technologies* – there is no problem in technology because the son has attended a technical training course for rice production. Also, the brother in-law of the wife has obtained a Bachelor Degree in aquaculture and he has taught fish raising technology. The household, hence, can draw on this competence in their fish production.

*Animal diseases* – three years ago they combined rice and duck production. This, however, failed due to an outbreak of bird flu and they stopped raising ducks.

**Impact of diversification on livelihoods and changing life styles:**

Since the family started raising fish it has had sufficient food and money to spend for the daily life of the family, but they do not have excess money. They do not intend to buy more land because they do not have any savings. Overall, they feel that their food situation has improved. Earlier they generally ate fish and vegetables, and drank alcohol only at limited special occasions. Now they eat fish, meat and vegetables, and drink alcohol during special occasion.

They were worried about their fish raising as they had invested quite large sums in fish fingerlings and were afraid of encountering losses. During the work-day they only rested for half an hour at noon time. They wake up at 4 am and go to sleep at 8 pm, which is similar to what they used to do before. Generally speaking, the household claims, life has not changed much – they feel free and happy now as they did before. A temporal comparison between the household's earlier situations with its present situation is given in Table 4.

**Table 4:** Changes in livelihood and life styles of the limited successful farm household

| Before                                                                                                            | Now                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Able to invest in the children's <i>education</i> , but they did not want to study more and only reached grade 6. | Able to invest in the children's <i>education</i> up to university level if they study hard.                                                         |
| <i>Clothes</i> – 2 new suits of clothes per person every year.                                                    | <i>Clothes</i> – 4 new suits of clothes per person every year.                                                                                       |
| Had small children – could earn money, but spent as little as possible in order to save some money-               | Can earn money, but spent more because one son still studying in grade 12 and have to buy new clothes for him to go to school in (6 suits per year). |
| The husband and his wife sometimes had small quarrels because the husband drank alcohol.                          | The husband and wife do not quarrel any more.                                                                                                        |
| Felt generally free and happy.                                                                                    | Feeling free and happy as before, no major change.                                                                                                   |

The household's economy is a little better, although not much better. If they had felt it to be much better they would already have renewed the house. The reason for the feeling that the household economy had not change a lot is that the total fish production is relatively low. According to the household the harvest of 6 tons of fingerling from the 6,000 m<sup>2</sup> fish pond is low – they harvest

three times a year and get about two tons of fish each time. They compared this with other farmers in the area who got 3-4 tons of fingerling at each harvest of a 6,000m<sup>2</sup> fish pond- They, hence, got 9-12 tons from 3 fish harvests per year. They also pointed out that the duration of each fingerling production cycle is two and a half months.



Husband, wife and youngest child in front the house of limited successful farmer in Thoi Long village



Some furniture in sitting room of limited successful farmer in Thoi Long village





Fish pond and plants on the bunds behind the house of limited successful farmer in Thoi Long village



Well and water containers at the back of the house of limited successful farmer in Thoi Long village

### 3. Unsuccessful farm household in Thoi Long village

The head of the household was 81 years old at the time of interview in 2007. All farm work were done and managed by the 46 years old daughter who lives with him. She studied up until grade 8, married and has one daughter. She has been divorced from the husband and lives with her father since the divorce. Four years ago her daughter married and lives in a separate household. There are only two persons in the house now – her old and sick father, and herself. Their house they live in is 4m x 6m – i.e. 24 m<sup>2</sup>. The front wall of the house is made of bricks while the other walls are thatched. The house has a metal roof; windows and doors made of wood. The ground around the house was paved with flat red bricks. Inside the house, there is one wood-cabinet for ancestor worship, one rectangular glass table, one wooden bed and one color television. They have one motorcycle, one electric fan and one 0.5 horse-power water pump. On one side of the house is a 2m x 6m lean-to made of thatch which is used for cooking and serves as kitchen. Next to the kitchen is the shelter, divided into three parts, for pig raising.

In terms of agricultural activities the daughter, on her own since several years, has engaged herself in rice farming, pig raising, fish raising in the pond and vegetable planting around the house. The rice yield has been low – only 3.3 tons per hectare in the dry season – due to bad weather and lack of

capital for hired labors and necessary inputs. She felt discouraged and that she failed in her rice production. As a consequence the household's rice land of 0.25 ha has been rented out since the wet season of 2005. The rent for the land is set at 1240 kg of rice per year. This rice is not used for sale but is ground to feed the pigs.

Presently she raises 4 pigs. In the past she used to raise both sows and pigs. However, she encountered losses from the production because prices were low. Also, the productivity of the sows was problematic, they only produced a limited number of piglets and she stopped raising sows at the end of 2006. The price received at selling pigs for meat was 1.2 million dong per 100 kg live pigs in 2006, and 2.2 million dong per 100 kg live pigs in 2007.

The native catfish was earlier raised in the fish pond, but the catch was lost due to theft of the fish. Presently no fish is raised in the fish pond with a size of 30m x 20m – i.e. 600 m<sup>2</sup>.

The household has 650 m<sup>2</sup> of mixed orchard around the house which is used for home consumption and is planted with mangoes, coconuts, banana, papaya and vegetables such as sweet potatoes.

#### Problems in diversification identified by the unsuccessful farm household:

A major problem identified is the lack of family labor, the daughter of the household has to hire labors at high costs to do heavy tasks, for example,

such as cutting trees for fuel in the. The wage of a male labor was 50,000 Dongs per day and 40,000 Dongs dong per day for a female labor.

She intends to let out the rice land for long a term because of the lack of family labors. If she should do rice farming she would have to work in the field for the whole day as she did not hired labor in order to save money. At rice harvesting season, she did rice drying, sacking and hauling herself because the rice collected from let out land was not dried well and she had to dry it again before it was stored. These tasks are heavy for her but she tries to overcome. After letting out the land, she feels better and needs not worry about capital inputs for pesticide and fertilizer. She felt that the worrying affected her sleep negatively, and instead she presently do other tasks – raising pigs, planting vegetables and other household chores.

Lack of capital is a major problem in pig raising and she has to buy feed (broken rice and rice bran) on credit. When selling the pigs, after four months of raising, the debt is paid to the seller of the feed from the rice mill. The owner of the rice mill was an acquaintance and, hence, she did not need have pay interest on the credit.

She cannot not get loan from the bank because her father's name is listed on the land right certificate. Her father is very old and the bank does not want give him a loan.

Her shelter for raising pigs is not good because the floor was low and the water does not run off when she cleans the pigs.

Technology for pig raising, however, was not a problem because her daughter is teacher that has

graduated from Can Tho University. Her daughter brought her books on how to raise pigs which she read, and she followed the instruction in the books. Her daughter is married and lives in O Mon town, four kilometers from her house, but she comes home to visit her daily.

#### **Impact on livelihoods and welfare:**

The daughter claims that life was difficult when her daughter was small. Her siblings, who are better-off than her and live in other places, had to support her with food, medicines and money for the daughter's tuition fee.

Though she has let out some land she is still very busy. She wakes up at 6:00 am and goes to bed at 7:00 pm. After lunch she rests 15-20 minutes, but otherwise she has no time for leisure. She watches television during the day by working and watching at the same time because the television is placed so it can be seen from the sitting room. She finds no time to visit relatives.

She attends social events only for a short time, and then she goes home. Her earnings are just sufficient for food and trying to keep out of being in debt. For a full year she has not been able to purchase any new clothes.

Now a major concern for the daughter is to try and get sufficiently nutritious food for her old father. She buys fish, pork and bones from the market, while vegetables such as sweet potato, dragon beans and flowers of *Sesbania grandifolia* are planted at home. Earlier, she claims, they did not have meat and bones to cook soup on.



House of unsuccessful farmer in Thoi Long village



Interior image and furniture in unsuccessful farmer's house in Thoi Long village

## CONCLUSION

Agricultural diversification has not always been successful because of the risks farmers face. The successful farm household has been able to invest in marked improvements in their livelihoods, has also been able to construct a new house. Their quality of life was markedly better. They feel happy and free as a consequence of better incomes from their agricultural diversification. The limited successful farmer in diversification felt that the life was generally as before. They had all the things they needed for their life, but they did not have any surpluses. The life of the unsuccessful household in diversification was difficult, however. Despite of failure or success, however, farmers faced problems in the different components of agricultural diversification. A major task for the extension service, and for research, should be to address the issues related to the impact of diversification for different types of households. The ambition should be to design and select appropriate models, with sufficient policy

support, to help farmers overcome the problems and risks linked to diversification.

## REFERENCES

- Ashok Gulati, A.; K. Ganguly, and M.R. Landes. 2009. Toward Contract Farming in a Changing Agrifood System. [http://www.icar.org.in/contract\\_%20farming/Resources/2.1%20Ashok%20Gulati.pdf](http://www.icar.org.in/contract_%20farming/Resources/2.1%20Ashok%20Gulati.pdf)
- Bosma, R. H.; H.M.J.Udo, J.A.J. Verreth, L. E.Visser and Cao Quoc Nam. 2005. Agriculture Diversification in the Mekong Delta: Farmers' Motives and Contributions to Livelihoods. *Asian Journal of Agriculture and Development*. Vol 2 (2005), No. 1&2 (June & December). Pp. 49-66
- Singh, R.B.; P. Kumar, T. Woodhead. 2002. Smallholder Farmers in India: Food Security and Agricultural Policy. FAO. <http://www.fao.org/DOCREP/005/AC484E/ac484e06.htm>

### **Khảo sát trường hợp nông dân rất thành công, thành công còn hạn chế và thất bại trong đa dạng hóa nông nghiệp ở Ô Môn, Cần Thơ**

Sự đa dạng hóa nông nghiệp không phải luôn luôn thành công do gặp phải những rủi ro. Sự thành công trong đa dạng hóa tùy thuộc vào điều kiện của mỗi nông dân. Hộ nông dân thành công cải thiện đời sống gia đình rõ rệt. Trái lại, nông dân bị thất bại trong đa dạng hóa, cuộc sống gia đình suy giảm. Nông dân thành công trong đa dạng hóa đã xây cất hoặc sửa chữa nhà mới, chất lượng cuộc sống gia đình tăng, cảm thấy vui vẻ, thoải mái do thu nhập tăng. Nông dân thành công trung bình trong đa dạng hóa có cuộc sống không thay đổi. Bất chấp sự thành công hay thất bại trong đa dạng hóa, nông dân phải đối mặt với những rủi ro trong từng hợp phần của hệ thống đa dạng hóa. Vì vậy, các nhà khoa học ngành khuyến nông và nghiên cứu cần khảo sát tác động của đa dạng hóa để chọn các mô hình thích hợp cùng với chính sách hỗ trợ nông dân giúp họ đối phó được những khó khăn và rủi ro.