

# NEED FOR COOPERATION AMONG FARMING HOUSEHOLDS IN AGRICULTURAL PRODUCTION IN CHÂU THÀNH DISTRICT, HẬU GIANG PROVINCE

by Dr. BÙI VĂN TRỊNH & MEcon. NGUYỄN HỮU TÂM\*

## Abstract

With appropriate research methods, this article analyzes the need for cooperation and proposes some essential solutions to the development of cooperation economy in the agricultural production of farming households in Châu Thành District, Hậu Giang Province.

In general, 88% of the farming households are in need of cooperation in the process of agricultural production. As for fruit-growing households, the percentage is 84% and for rice-growing ones, this need is even higher because 92% of them would like to cooperate with others. The reason for cooperation is that the process of rice growing requires many stages that cannot be postponed. In addition, rice-growing depends heavily on the weather.

There are two short-term and seven long-term solutions to development of cooperation economy in the agricultural sector of Châu Thành District in line with the cooperation need of the farming households

Keywords: cooperation, cooperation need

## 1. Problem

There is a problem originating from the fact that many cooperatives operating under a new model have come into being. As early as 2004 (when Châu Thành District was divided into two different ones on Jan. 1, 2004), in the district there were 20 agricultural cooperatives and one construction cooperative, but in late 2007 (four years later), there have been 23 additional agri-

cultural cooperatives and one more cooperative producing furniture. However, most of them have not yet met the farmers' requirement of genuine cooperation, and this has led to their inefficiency and the rest have been dissolved. In late 2007, only 10 cooperatives operated effectively while four others were acceptable. The remaining cooperatives operated ineffectively; some ceased to operate, some on the way to be dissolved or have just been strengthened. Therefore, in order to meet the genuine need of the farmers, it is necessary to study and evaluate their cooperation need scientifically in order to ensure good performance, improve the quality of farm products for the market as well as to make a profit for the farmers.

This paper aims at three objectives: (1) Analyzing the cooperation between farmers in agricultural production; (2) Analyzing the cooperation need of farmers in agricultural production in the coming time; and (3) Proposing some solutions to improvement in cooperation between farmers.

## 2. Methodology

### *a. Information collecting method*

- Secondary information is collected from the Châu Thành Agricultural and Rural Development Office, and from books, the media, and the Internet, among others.

- Firsthand information is gained from a survey of 100 farmers in the district via questionnaire. Of these farmers, 50 are fruit-growing ones and the other 50 are rice-growing ones. PRA method is also used for the research.

## ***b. Data analysis method***

- For objective (1): Using descriptive statistics and comparative method to analyse the cooperation between fruit-growing farmers and rice-growing ones, and between farmers who are now in cooperatives and those who are not yet in cooperatives.

- For objective (2): Applying frequency statistics to evaluate and find out the need for cooperation among farmers in the coming time and coefficient of binary correlation to test the relationship between the needs for cooperation.

-For objective (3): Based on the results of the analysis of objective (1) and (2), we propose some essential solutions.

## **3. Results and discussion**

### ***a. Analysis of the cooperation needs of the farmers***

The results of the research show that up to 88% of the farmers have the need for cooperation. It is worth noting that of 23% of the farmers who have already joined cooperatives, 21% of them are still in need for cooperation (91.3%). This shows that services given by the cooperation organizations are not suitable to the needs of farmers or the quality of services is not high enough.

As for fruit-growing farmers alone, 84% of them have the need for cooperation. As for fruit-growing farmers who are not yet in cooperatives, the percentage is only 77.8%. These results show that farmers in cooperatives have higher needs for cooperation than those who are not because farmers have clearly realized the benefit of cooperation and admitted that only by cooperation could they develop strongly and well.

As for rice-growing farmers, the need for cooperation is even higher and up to 92% of them have the need for it. Contrary to fruit-growing farmers, however, rice-growing farmers who are not yet in cooperatives account for 95.1% of those who need cooperation. These results show that rice-growing farmers are meeting with countless difficulties and require cooperation in production. The reason for this high need for cooperation is that rice-growing has shorter cultivating cycle than that of fruit-growing and rice-growing requires many stages that cannot be postponed and it has to depend heavily on the weather. Moreover, the educational level of rice-growing farmers is lower

than that of fruit-growing ones: rice-growing farmers who have finished senior high school or above account for only 12% while this percentage among fruit-growing ones is 22%.

- The need for cooperation concerning production services:

For fruit-growing farmers, this need accounts for only 10% while that of rice-growing farmers accounts for 30%. These figures only relate to farmers who have been interviewed but the percentages of the farmers who are not yet in cooperatives would be as follows: 11.1% of fruit-growing farmers have the need for cooperation, and 34.1% of rice-growing farmers have the need for cooperation. This shows that there is little difference between the need for cooperation of farmers who are cooperative members and that of those who are not.

- The need for cooperation in securing good seed:

Seed is a very important production factor in agriculture. Choosing proper seeds would help enhance the productivity, improve the quality, increase the resistance of the crop plants and enhance the adaptability of the seed in the context of mechanization in production. Thus, cooperation in securing good seeds is extremely necessary. Fruit-growing farmers who have the need for cooperation in producing good seeds account for 14%, but for farmers who are not yet cooperative members, the percentage is only 8.3%. As for rice-growing farmers, the percentages are 32% and 34.1% respectively. Like the need for cooperation in production services, the need for cooperation in securing seeds of rice-growing farmers is much higher than that of the fruit-growing farmers.

- The need for cooperation in production materials:

Fertilizer is an important factor in the farmers' business. However, different plants at different stages and on different soil require different fertilizing methods. Therefore, in order to get high productivity from crops, it is necessary to use fertilizer at the right time and with the right amount. Some major fertilizers for crops are: nitrogenous fertilizer, phosphate fertilizer, kali fertilizer and organic fertilizer. Besides, plant-protecting drug is no less important in the process of production of farmers nowadays. Because of the great impact of natural catastrophes

and diseases, it is very necessary to spray the right insecticide at the right time and way and with the right amount. Only by so doing could farmers increase their income and reduce costs.

The results of the research show that up to 60% of fruit-growing farmers have the need for cooperation in buying farming materials while this need among rice-growing farmers account for only 44%. Putting aside the farmers who are already cooperative members, the need for cooperation in securing materials among fruit-growing farmers accounts for 69.4% and among rice-growing ones this need reaches 46.3%. It is apparent that when excluding the farmers who are already in cooperatives, the need for cooperation among other farmers increases and this shows that farmers have realized the importance of farming materials especially when their prices are more and more going up.

- The need for cooperation in getting credit:

Capital is an extremely important input: without capital one could not produce; without capital one could not invest, either. In short, without capital one could not do anything at all. So the need for capital in production and in agriculture in particular, is very high and cultivators are always in need of cooperation in getting loans to favorably develop family economy. Specifically, the need for cooperation in getting loans of farmers is as follows:

According to the results of the analysis, 16% of the fruit-growing farmers have the need for cooperation in getting credit while that percentage among the rice-growing farmers is 40%. In reality, this is true because fruit tree is a perennial in which farmers only have to invest much at the beginning and at this point they need capital most but after the fruits are sold, the farmers' incomes are usually high and their need for capital is not urgent. When growing rice, farmers always have to make new investments because the harvests are short and they have the need for capital.

That is a general view, but when mentioning farmers who are not yet in cooperatives, the results of the research show that 5.6% of the fruit-growing farmers have the need for credit and among rice-growing farmers the percentage is 39%. In general, the need for credit among rice-growing farmers who are not yet cooperative members does not vary much. As for fruit-growing

farmers, there is a difference in the need for credit between all farmers as a group and those who are not cooperative members. This is because the farmers who are not yet in cooperatives have rather big source of capital and their orchards are in harvest.

- The need for cooperation in distributing products:

Product distribution is an extremely important factor that could be considered as a stage in the process of production. Products sold at reasonable price are consumed thoroughly and timely and profit from the agricultural production could enable farmers to believe in their well-being and thus continue to cultivate in the following crops. This is a good signal for farmers but distribution of farm products is not an easy task because traders tend to lower the price as much as possible and market demand is not stable and predictable.

Meeting with those realities, farmers have the need for cooperation to distribute their produce effectively to solve their problems.

The results of the research indicate that 54% of the fruit-growing farmers have the need for cooperation in securing good consumption but the percentage of the rice-growing farmers is only 12%. Of the farmers who are not yet cooperative members, 61.1% of the fruit-growing farmers have the need for cooperation in expanding their market share and 14.6% of the rice-growing farmers have the same need. These results show that the need for such cooperation among fruit-growing farmers is very high because fruit markets are not stable and prices are always fluctuating. At the same time, the need for cooperation in distribution among farmers who have not joined cooperatives is higher than that of the farmers who are already cooperative members. This means that farmers who are cooperative members have more favorable conditions for distribution than those who are not. In general, the need for cooperation in distribution among rice-growing farmers is low even with those who are not yet cooperative members. At present because of the high demand for rice on both domestic and foreign markets, the rice is always sold quickly and at very high prices, therefore the farmers' need for cooperation in distribution is low.

- Other needs for cooperation:

Besides those above-mentioned needs for coop-

eration, fruit-growing farmers also have other needs for cooperation (with enterprises, or in securing extra labor during the sowing season, etc.) and 10% of the total of fruit-growing farmers have these other needs. But among rice-growing farmers this percentage is lower, around 8%. All these figures only relate to farmers (50 fruit-growing farmers and 50 rice-growing ones) who have been interviewed. The need for cooperation of farmers who are not cooperative member, is found in 5.6% of the fruit-growing farmers and 7.3% of the rice-growing farmers. Excluding farmers who are already cooperative members, the need for cooperation among fruit-growing farmers reduces by half. There is little difference between the need for cooperation of farmers who are cooperative members and that of farmers who are not.

- Total of needs for cooperation:

Almost farmers - members of cooperatives or not- have the need for cooperation. The needs for cooperation are as follows:

**Table 1: Ranking of farmers' needs for cooperation**

Source: Authors' survey in Châu Thành in 2008

Need for cooperation	Fruit tree (%)	Rice (%)	100 samples (%)	Ranking
Production service	10	30	20	V
Good seed	14	32	23	IV
Farming materials	60	44	52	I
Credit	16	40	28	III
Distribution	54	12	33	II
Others	10	8	9	VI

Table 1 shows that the farmers' need for farming materials is very high and in reality, this is true because, based on the above analysis, both fruit-growing farmers and rice-growing ones have to meet high expenses on such materials. The prices of materials on the market at the time when the research was carried out and at present are very high compared with the same period of the previous year. For example, in February 2007, the market price of a bag of URE fertilizer (50 kg/bag) in Châu Thành was about VND275,000 but in February 2008 the same bag of fertilizer cost about VND450,000 on the same market (PRA interview on May 28, 2008), an increase of 1.6

times. Sale of farming materials at reasonable prices to cooperative members would help farmers to reduce production cost.

In addition to the need for farming materials, the product distribution, as mentioned above, is an important stage in agricultural production, so it is inevitable that the farmers' need for cooperation is high.

The need for cooperation in securing loans is ranked third among their needs. This is reasonable because when farmers have difficulties about credit, they could also get loans from their families, relatives, and banks, etc... Moreover, these results match with those of PRA interview (when asked to rank their difficulties according to binary comparison matrix, interviewees rank capital third).

Next are the needs for good seeds, for farming materials, and finally for other needs.

Results of the research show the relations between the needs for co-operation.

As for the group of fruit-growing farmers, there is a linear correlation between the needs for cooperation in securing good seed and loans with the coefficient of correlation of two variables of 0.296 (significant at 5%), and a linear correlation between the needs for cooperation in securing farming materials and in product distribution with a coefficient between two variables of 0.393 (significant at 1%). Other variables do not have linear correlation at the level of significance of 5%.

As for the group of rice-growing farmers, there exists a linear correlation between the need for production services and the need for good seed with coefficient of correlation of 0.299 (significant at 5%); and a linear correlation between the the needs for product distribution and other needs with a coefficient of 0.345 (significant at 5%). Other variables have no linear correlation at the level of significance of 5%.

Table 2 shows the linear correlations between variables from 100 surveyed samples.

In general, some variables have relations with each others, especially 'the need for product distribution,' 'the need for good seed,' and 'the need for loan.' The noteworthy is the fact that 'other needs' as a variable has no linear correlation with any other variables. As for variables with some linear correlations, their correlations are not

**Table 2: Correlation between needs for cooperation**

Need for cooperation		Production service	Good seed	Materials	Loan	Product distribution	Others
Production service	Pearson Correlation	1	-	-	-	-	-
	Sig. (2-tailed)	-	-	-	-	-	-
Good seed	Pearson Correlation	0.261**	1	-	-	-	-
	Sig. (2-tailed)	0.009	-	-	-	-	-
Materials	Pearson Correlation	-0.07	-0.283**	1	-	-	-
	Sig. (2-tailed)	0.489	0.004	-	-	-	-
Loan	Pearson Correlation	0.134	0.188	-0.248*	1	-	-
	Sig. (2-tailed)	0.185	0.06	0.013	-	-	-
Product distribution	Pearson Correlation	-0.298**	-0.232*	0.206*	-0.201*	1	-
	Sig. (2-tailed)	0.003	0.02	0.04	0.045	-	-
Others	Pearson Correlation	-0.157	-0.006	-0.118	0.115	0.151	1
	Sig. (2-tailed)	0.118	0.954	0.244	0.254	0.134	-

Source: From results of the survey in Châu Thành - 2008

Note: \*\* Significance up to 1%. \* Significance up to 5%

close.

- In the linear correlation between the 'need for production service' and 'the need for good seed,' the correlation coefficient is 0.261 (significant at 1%).

- In the linear correlation between 'the need for production service' and 'the need for product distribution,' the correlation coefficient is -0.298 (significant at 1%).

- In the linear correlation between 'the need for good seed' and 'the need for materials,' the correlation coefficient is -0.283 (significant at 1%).

- In the linear correlation between 'the need for good seed' and 'the need for product distribution,' the correlation coefficient is -0.232 (significant at 1%).

- In the linear correlation between 'the need for materials' and 'the need for loan,' the correlation coefficient is -0.248 (significant at 5%).

- In the linear correlation between 'the need for materials' and 'the need for product distribution,' the correlation coefficient is 0.206 (significant at 5%).

- In the linear correlation between 'the need for loan' and 'the need for product distribution,' the correlation coefficient is -0.201 (significant at 5%).

The analysis shows that the farmers' needs for cooperation have little correlation with each other, that is, when a certain need for cooperation, such as the one for materials, is solved, other needs for cooperation are not reduced considerably.

## ***b. Some essential solutions to the development of cooperative economy for farmers in Châu Thành:***

- Settling the practical needs for cooperation of farmers in order to overcome difficulties in production by building up cooperation groups and cooperatives: The task of building up cooperation groups and cooperatives should be carried out gradually, from simple to complicated steps. Thus cooperatives should begin with one operation first and do it well before proceeding to carry out more and more operations. Moreover, cooperatives can establish some vertical link in order to expand the scale needed for implementation of more complicated operations.

- It is necessary to develop many different forms of cooperation from local levels to higher ones so that people in different areas could choose what they find best. Because the setting up of cooperatives is a long and difficult process in which one should learn along the way, it is necessary to develop small cooperating groups all over the locality in order to help and support each other to

develop production just like the way it should be with previous mutual aid teams. There should be a legal framework for cooperatives to operate in. Therefore, it is necessary to set rules of cooperating relation and provide for diversified forms of cooperating groups and the cooperative should never be considered as the highest form of cooperation. Diversity of forms of cooperation is also due to the fact that different businesses have their own forms of operations that require an appropriate form of cooperation.

- It is necessary to make an overall examination of cooperating groups and cooperatives and classify them according to practical standards in the locality with reference to the standards of the Cooperative Office under the Union of Hậu Giang Cooperatives. While carrying out this task, it is necessary to pay attention to opinions of cooperative members to draw out specific conclusions for each cooperating group and cooperative. Based on the above conclusions, authorities can initiatively disassemble cooperating groups and cooperatives with poor performance in order to avoid damaging the confidence.

- The results of the research show that the majority of farmers only own small patches of land so they should cooperate with each other. Each farmer cultivates on a small area. But when farmers cooperate, the cultivated area becomes large and then new techniques and mechanization could be applied, which would lead to the reduction of production costs, improvement in productivity and product quality and higher prices of the farm products. Besides, this situation could also be overcome with policies on accumulation of land.

- It is necessary to show farmers that cooperation is beneficial and could reduce risks and expenses and raise their profit. The results of the research show that the production capacity of farmers is still very weak. Therefore, authorities should provide them with more information about market prices and standards of farm products for export, etc. in order to help them work out better business plans. Full attention must be paid to information about agricultural extension to develop the agriculture for the sake of the farmers.

- It is necessary to show farmers that technical advances in science are not influenced by the scale of production but the mentality of producers. Farmers should be convinced that they need tech-

nical training and technology transfer even when they cultivate on small areas instead of relying only on their experience.

The results of the research also show that agricultural production of small scale makes the quality of rice vary because of different strains, techniques and practices, which prevents farmers from requiring higher prices when selling their produce to traders. It is necessary to change and raise the farmers' awareness in applying technical advances systematically so that they could produce farm products in large quantity and with equal quality as well as improve their competitiveness.

- Farmers still have the habit of using seeds of unstable quality though they can get access to better seeds on world market after Vietnam's integration into the international economy. Farmers only care about cheap rice seeds but not the demand of the market for good rice from good seeds. Thus, they have the habit of using seeds left over from their own rice or exchange seeds with other farmers nearby. They also have the habit of using different kinds of seeds on the same area of soil and as a result, they produce rice of different qualities. Some farmers use seeds produced by seed centers but they could not sell their rice at high prices because their small output do not allow them to do so. This does not encourage farmers to realize importance of seed to the selling price. In order to solve the problem relating to the quality of farm products, it is necessary to ensure the supply of good seed to the farmers. In doing this task, the role of the organizations and agencies in charge is very important and they should have high responsibility when they persuade farmers to use good seeds and help farmers to apply technical advances. These organizations and agencies could be suppliers of good seed if necessary. Nowadays, farmers are well aware of what seed to use as shown in the fact that they refuse to plant the third crop. If leaders at all levels support dealing with the seed problem, it can be solved in the near future.

- Because of the difference in the resources of farming households, the application of technical advances in the target area of the research is not consistent. This means that the frequency of attendance at technical training courses changes over households. This, then, leads to the low efficiency of application of technical advances. Specif-

ically some farmers still use the rice seeds left from the previous crop and they could not apply technical advances because of the shortage of farming equipment. Besides, farmers who do apply technical advances do not closely follow techniques instructed by agricultural technicians because they worry about extra expenses or extra time needed for such application. Agricultural extension technicians should supply more information about efficiency of good innovative models in order to make farmers more confident and agree to invest more time and money in their business. To improve the efficiency of the dissemination and application of new technical advances requires some basic knowledge from farmers who take training courses so they can, after these courses, not only apply technical advances to their own crops but also disseminate their information and knowledge to other farming households in the locality.

- It is necessary to build up wholesale markets to help farmers to sell their farm products at high price and to avoid being exploited by private traders. In order to cope with the problem of product distribution, it is necessary to proceed with upgrading rural communication network because this is the major condition to help farmers get access to the market for their products. The costly means of communication and transportation make transportation expenses increase, so private traders tend to offer low prices for farm products as a compensation for high transportation costs. The problem here is who would be in charge of wholesale markets once they have been completed? If no one takes charge of those markets, they would be neglected and left stranded. Local officials cannot take charge of the markets because they already have too much work to care about the markets properly. If an organization or an individual takes charge of the markets, it would easily lead to the problem of low price imposed by small traders and purchasers. The only agency can do well this job is cooperatives because they are made of farming households and therefore they would take charge of the markets for their own interests.

#### 4. Conclusion

There are many favorable factors in terms of natural conditions and experience in agricultural production of Châu Thành District. However, there are still some difficulties left and it is nec-

essary to cooperate with each other to overcome them. Cooperation is the most effective measure to overcome difficulties, defend one's interests, and enhance farmers' bargaining power in the market. It is also what farming households wish to do as shown in the following figures: the need for cooperation in securing farming materials is found in 52% of surveyed farmers, selling their product, 33%, along with many other needs. To make this cooperation really effective, however, all parties should perform their duties properly. Farmers should not consider cooperating groups or cooperatives as a place to find governmental support. The government or local authorities should not consider cooperating groups and cooperatives as their own successful achievements in management. If it should be so, cooperating groups and cooperatives, then, could play well their roles in the market economy these days■

#### References

1. Diệp Thanh Tùng (2007). "Giải pháp phát triển HTX nông nghiệp và tiểu thủ công nghiệp ở tỉnh Trà Vinh" (Solutions to the development of agricultural and handicraft cooperatives in Trà Vinh Province) - MBA Thesis on Business Administration - Cần Thơ University - Trà Vinh.
2. Project VIE/98/004/B/01/99 (2003). *Nghiên cứu nhu cầu nông dân* (A study of farmers' needs). Thống kê Publishing House, Hà Nội.
3. Trần Quốc Khánh, Hoàng Ngọc Việc, Nguyễn Đình Nam, Ngô Đức Cát, Phạm Văn Khôi & Vũ Thị Minh (2005). *Giáo trình quản trị kinh doanh nông nghiệp* (Agriculture Administration Textbook), Lao Động Publishing House, Hà Nội.
4. Vũ Đình Thắng, Trần Thị Thành, Đoàn Xuân Tiến (2005). *Giáo trình kinh tế nông nghiệp* (Agricultural Economics Textbook), Hà Nội Publishing House- Hà Nội.
5. Agriculture and Rural Development Office - Châu Thành District- Hậu Giang Province. Suming up Reports 2005, 2006, 2007-Project Orientation 2008
6. <http://www.haugiang.gov.vn/Portal/OtherNewsView.aspx?pageid=95&ItemID=115&mid=162&pageindex=6&siteid=1>