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# CONTRACT FARMING AND ITS IMPACT ON INCOME AND LIVELIHOODS FOR SMALL-SCALE FARMERS: CASE STUDY IN VIETNAM

Nham Phong Tuan

Vietnam National University, Hanoi

Abstract. Contract farming has been expected as one of the measures to facilitate participation of farmers in the production of agriculture commercially, adding more values to agricultural produces. Mixed evidence in Vietnam however, has been shown on the well-known advantage of the contract farming to small farmers such as reduce the cost to access to market, accessing credit, obtaining information on market opportunities or new technologies, purchasing certain inputs and accessing product markets and reducing price fluctuations. The purpose of this study was to analyse the impact of contract farming to farmers and to determine policies to facilitate farmer entry into beneficial contractual relationships. In addition to the literature review, one intensive case study of contract farming practices with commodity was conducted. The results from the study have direct relevance to work of agencies and organizations working to promote the welfare of small holding farmers, either through practical field support or through policy advocacy.

Key words: contract farming, impact, farmers, income, livelihood, case studies

# INTRODUCTION

With ninety per cent of the poor or three quarters of the population of Vietnam living on agriculture in the rural areas by growing and selling, agriculture still plays an important role for this group even when the structure of the economy is changing toward industrialization. However, there have been evidences that agriculture's contribution to the country's economy is not equally distributed to the number of people involved in this sector, for many reasons. In Vietnam, contract farming (CF) is considered

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Corresponding author – Adres do korespondencji: dr. Nham Phong Tuan, Faculty of Business Administration, University of Economics and Business, Vietnam National University, Hanoi, e-mail: tuannp@vnu.edu.vn; tuandhtm@gmail.com

as a measure to foster better linkages in agriculture, in particular, the farmer, the scientist, the government and the agribusiness, which was formally recognised and encouraged by the Government with the issuance of the Decree 80/2002/QĐ-TTG on 24 June 2002 to encourage the selling of agricultural commodities through contracts. Thus, a deeper understanding of impact of contract farming on farmers would serve both the Government and development supporting agencies to take advantage of this intervention.

In Vietnam and other countries, there have been a lot of previous researches on contract farming. Most of them have shown that contract farming could provide small scale farmers with better access to the market, better access to production inputs, ability to mitigate the risk, assuring higher returns and offering dispute solutions for parties involved. However, these earlier studies on contract farming still have a number of limitations, especially in Vietnam. Most of them focused more on analysing from companies' perspective rather than focusing on the farmers. The dynamics and context specific factors of the parties have not been analysed on a single case to get a fuller understanding.

The study hopes to fill in this gap by building on the previous studies on the general contract farming modalities and with a more thorough analysis of one case. The analysis will be framed from sides, farmers and companies, with a stronger emphasis on the former. The study specifically assesses both negative and positive impacts on income and livelihoods of small-scale farmers involved in multi partite model of contract farming. It also identifies the key ingredients for mutually beneficial agreements in the contract farming arrangement, leading to recommendations of action points for the government, the NGOs and farmers. The following research questions have been used:

- Whether the model of CF arrangement is a determinant of increasing the benefits for small-scale farmers?
- Which elements in CF contractual terms facilitating a risk sharing mechanism would increase the benefits for small-scale farmers?
- Which elements in CF implementation or supporting factors would increase the benefits for small-scale farmers?

This study is organized into seven sections excluding References. The second and third sections cover the literature review on contract farming, and research design and methodology correspondingly. The case is presented with specific observations. An comprehensive analysis in section V lays for the foundation for the identification of success factors in Contract farming in section VI along with recommendations.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

# **Overview of Contract Farming**

Contract farming can be defined as "an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices" [Eaton and Shepherd 2001, p. 2]. Contracts are often initiated by agribusiness firms (processors, traders), which undertake backward linkages by forming alliances with groups of smallholders and, through written or verbal agreement, specifying provision of farm inputs such as credit and extension in return for guaranteed delivery of products with specific quality often at predetermined prices.

From the world experience, contract farming is more commonly found in exporting commodities or large processors where a steady supply of raw materials or high value crops are needed. Contracting is rare for basic staple foods produced for local consumption and more common for industrial crops (e.g. sugarcane, tobacco, and tea), poultry, dairy, and horticulture, particularly when destined for high-income consumers willing to pay a premium for quality and food safety [Minot 1986]. Contract farming is found to be only cost-effective when large-scale buyers, such as processors or exporters, need to introduce a new crop, to obtain special product characteristics, to stagger the harvest over the year, or to control some aspect of the production methods. Contract farming is typically used to organize production of perishable, high-value commodities for a quality-sensitive market [Minot 1986].

Contract farming schemes can take numerous forms. However, according to Eaton and Shepherd [2001], contract farming can be categorized either by the intensity of contractual arrangement or the schemes of organizational structures (the organization of stakeholders within the scheme). Looking from the objective perspectives, contract could be drafted to transfer decisions – rights and transfer of risk. The three typologies of contracts then are used, including market provision, resource provision and production management specification [Mighell and Jones 1963]. The schemes of contract organizational structures depend on the nature of the product, resources of the processors and the intensity of the relationship between farmers and processors.

# Contract farming and benefits for farmers

This subsection will review the relationship between contract farming and benefits (income and livelihood) for small scale farmers. Then, overall hypothesis will be set up to be investigated in two case studies in next sections.

There are evidences from Minot and Roy [2006] and Reardon et al. [2003] who had made a prediction that contract farming is a growing trend in Asia due to high-value agriculture, supermarkets, processing, and export-oriented agriculture suggest that the importance of contract farming is growing. Bijman [2008] reviewed the literature on contract farming also noted the inducement of contract farming by development agencies to link farmers to the market.

Critics of contract farming argue that large agribusiness firms use contracts to take advantage of cheap labour and transfer production risk to farmers. Another concern is that because companies tend to prefer to work with medium- and large-scale growers, smallholders will be marginalized, exacerbating rural inequality [Living under contract... 1994, Singh 2002] and lack of environmental sustainability concern. However, there is also ample evidence of contract farming bringing out higher income for farmers among many other benefits which are demonstrated in literature. Because the contracts often involve the provision of seed, fertilizer, and technical assistance on credit and a guaranteed price at harvest, this form of vertical coordination simultaneously solves a number of constraints on small-farm productivity, including access to inputs, credit, and risk. In this view, contract farming is an institutional solution to the problems of market failure in the provision of credit and agricultural inputs [Grosh 1994, Key and Runsten 1999]. Studying contract farming in peanuts in Senegal, for example, it was found that the increase in gross agricultural revenues associated with contracting was statistically significant and large, equal to about 55% of the average revenue of non-

contract farmers. Simmons et al. [2005] studied the contract growers of poultry, seed maize, and seed rice in Indonesia and also concluded that the contracts increase income and welfare, reducing absolute poverty. Ramaswami et al. [2006] also found the benefits of contract farming to farmers include gaining from management assistance and credit provided by the firm and reducing the variability of gross margins across production cycles.

Reviewing the empirical literature on the inclusion of small-scale farmers by contract farming we can found mixed evidences. For example, he cited Key and Runsten [1999, p. 396] research that showed a clear preference of (foreign) processing companies to contract with large-scale growers due to the transaction costs associated with providing inputs, credit, extension services, and product collection and grading to small scale growers. Guo et al. [2005], and Simmons et al. [2005] also found that agribusiness firms prefer to deal with relatively large producers. However, other studies by Miyata et al. [2007] on contract farming on horticulture in China, Birthal et al. [2005] on milk, broilers and vegetables in India did not find this bias against small farmers.

In Vietnam, the Prime Minister has issued a decision to promote contract farming (agricultural contract) between farmers and processors/traders (Decision 80/2002/QD-TTg) in 2002. Accordingly, enterprises of all sectors are encouraged to sign contracts on sales of farm produce with producers in order to link production with processing and consumption of commodity farm produce to develop production in a stable and sustainable manner. The contract shall serve as legal basis for binding the parties in their responsibilities and obligations, protecting the rights and legitimate interests of the raw material producers and the production, business, processing and exporting enterprises under contractual provisions. In order to implement this decision, several documents at the ministerial level were issued, e.g. Decision 52/2002/QD-BNN of the Ministry of Agriculture and Rural Development on guideline and sample of agricultural contracts. Circular 05/2002/TT-NHNN of the State Bank provided guiding loan capital provisions to producers and enterprises signing agricultural contracts. Circular 04/2003/TT-BTC of the Ministry of Finance provided guideline for finance issues to implement Decision 80/2002/OD-TTg. In 2008, the Prime Minister signed a Directive (Directive 25/2008/ CT-TTg) to enhance the implementation of contract farming. In addition, other policies such as the Law on Association, Law on Cooperatives and numerous programs to support specific commodities, the New Rural Program and public private partnership promotion policies have created a legal environment for contract farming.

Contract farming has gained more attention from researchers and practitioners probably around 2002, after the issuance of the Decision 80. Examples of contract farming in wide range of agricultural products in Vietnam have been documented, particularly for staple food (rice), industrial crops (cassava, sugarcane, fruit...), forestry products (timbers, herbs...), livestock (poultry, milk...), and fishery products (shrimp, shell, fish). Asian Development Bank (ADB) [30 cases... 2005] conducted one of the first comprehensive documentation of contract farming examples in Vietnam with clear categorisation of contract models into multi-partite, centralized, nucleus estate, and informal and intermediary modalities in commodities such as vegetables, jute and cotton, tobacco, rose, pineapple, and pork. In terms of modality of contract farming and the benefit for farmers, ADB [30 cases... 2005] advocated for multipartite modality as an effective mechanism to ensure the benefit of farmers protected. Costales et al. [2008] saw more

potential in informal contract farming with cooperatives particularly in swine industry to engage small holders to overcome barriers to credit and access.

Many other researchers, such as Dang Kim Son et al. [2005], Pham Quang Dieu et al. [2004], Tran Cong Thang et al. [2005], Nguyen Do Anh Tuan et al. [2005] and 30 cases... [2005], looked into cases of CF and provided general remarks that CF could potentially be an effective way to draw the poor into commercialized agriculture. Saigenji and Zeller [2009] investigated the effect of contract farming on production and income of tea farmers in north-western Vietnam. They found positive impact of contract farming in tea production in Moc Chau district in terms providing higher technical efficiency and slightly higher income to households.

To assess the impact of contract farming on the small-scale farmers, Contract... [2008] proposed a list of criteria based on extensive review of contract farming experiences in ASEAN countries, categorising into economic, agriculture production and management, governance, environmental and development aspects. This research used some of these criteria in guiding the pro poor analysis. In addition, a governance analysis of the contract taking into account of the rule and regulations, the enforcement and services in which the contract is situated will be used.

Based on previous studies above, it can be seen that contract farming has attracted serious concern from State and Government. It exists in a lot of commodities. Although there are both successful and unsuccessful cases of contract farming, it can be hypothesized that contract farming arrangement has positive effect on benefits for small scale farmers. Besides, among five available models in Vietnam, multi partite model is considered as the best model for benefits of small scale farmers. Therefore, a following overall hypothesis can be tested in this study.

Overall hypothesis: Contract farming arrangement has positive impact on benefits for small scale farmers in multi partite model of contract farming.

## RESEARCH DESIGN AND METHODOLOGY

## Methodology

A dual-method approach using Governance and Institutional Analysis and a Pro-Poor Analysis of the Contract is utilized in this study. The governance and institutional analysis investigated power within production and exchange relationships in the contract. We separated the three dimensions of the governance of the contract: (1) Rules and Regulations (2) Enforcement and (3) Services. In analysing the Rules & Regulations in the contract, we identified the actors that set the rules, assessed how the rules affect different categories of actors within the contract, how much different actors know about the rules and the rate of change of the rules. To analyse enforcement, we looked at who monitors compliance to the rules, identified the system of sanctions available to punish defectors, and the system of incentives used to promote the application of the rules; and assessed of the effectiveness of the sanction/incentives system. The analysis of Support Services include the analysis of assistance to linkage participants; the available forms of assistance for different categories of linkage actors; the degree of satisfac-

tion of different categories of actors with the services and assistance provided; and which linkages/services should be improved.

The pro-poor analysis relied on primary data collection through interviewing local parties including farmers and business experts; secondary analysis through desk research and existing contract farming and qualitative analysis using key informant interviews and focus groups. Specifically, we looked at cost distribution and risk sharing, the evidence of the inclusion of small-scale farmers and perceived benefits through the contract farming model.

## Data and sample

Through desk study and interview with key experts, the study focused on the contract-farming model for Peanuts in Nghe An Province. The commodity has been chosen on the basis of three main criteria: a) being a strategic commodity those small-scale farmers and poor farmers can involve, b) potential to improve livelihood of the small-scale, c) existence of contract farming arrangement, specifically the multi partite model. The following Table 1 shows several descriptive information about the case and number of depth interviews with stakeholders through field visits in Nghe An Province.

Table 1. Snapshot of the case studies and observations Tabela 1. Ujęcie studiów przypadku i obserwacji

Province Commodities Company Contract type Prowincja Towary Firma Rodzaj kontraktu	Key characteristics Główna charakterystyka	Representativeness of the population Reprezentatywność populacji	Number of Interviews Liczba wywiadów
Nghe An Company X Firma X Multi partite Wieloczęściowy	cash crop uprawa rynkowa competitive buyers and producers konkurencyjni nabywcy i producenci traditional crop, well established tradycyjna uprawa, ogólnie przyjęta walue adding/specification of crop dodawanie wartości/specyfikacja uprawy	representing contracts in private company for a commodity with competitive market; extensive external support to set up the model reprezentująca kontakty w firmie prywatnej na towar z rynkiem konkurencji; rozległe wsparcie zewnętrzne w ustanowieniu wzorca CF has more significance in introducing agricultural practice rather than a marketing tool kontraktacja ma większe znaczenie przy wprowadzaniu praktyki rolniczej niż jako narzędzie marketingowe	14

The term small-scale farmers are used quite loose, to denote two characteristics, having limited farming area and not having the resources to invest in expanding the farming practice on their own. These households are typically average to poor households in a community.

The choice of case biased towards the crops where small-scale farmers can participate with little investment to better analyse the impact of contract farming on them. While this might affect the validity of the case selection, researchers were keen to find out if the contract farming would further bias towards a certain characteristics of small scale farmers.

### CASE II-CONTRACT FARMING IN KERNEL PEANUTS IN NGHE AN

# Key stakeholders

The Agricultural Competitive Promotion (ACP) Project

From 2009, Nghe An implemented Phase II of the Agricultural Competitive Promotion (ACP) Project, an ODA project with funding from World Bank. The 7 million USD funding for Nghe An aims to build up a model of alliance between companies and farmers for key agricultural produces for Nghe An, including tea, peanuts, rice seedling, corn, duck and silk worm. For peanuts, two alliances were established after two years of careful value chain study and organizational capacity screening. In Dien Chau District, the private proprietor, Company X, joined with the Dien Thinh Cooperative to produce and branding a premium Sen Lai Dien Chau peanut kernels for commercial trading.

## Company X

Company X has been trading seeds and other agricultural produces such as maize and rice since 1990. The major trading partners of the Company are Chinese and Thai buyer (through informal border trading), large export companies and small traders in other provinces. They also secure contract to sell to the Food Reserve of the Province. In Winter 2011, the amount bought from Contract with the Alliance was 500-700 tonnes, contributing to the average trading volume of 3,000 tonnes of peanuts of the Company. The Company is now expanding its processing facility and build up a brand for their peanuts. It relies on a network of collectors and small outlets to provide supply and also to sell.

Prior to entering the contract farming, the Company had built up a good reputation for farmers. It is well known for offering higher price, buying large quantity and making quick payment. Small collectors and farmers sometimes hire them to dry peanuts. Farmers can also ask the Company to sell or advance seed peanuts if they need and the Company is willing to do so, even it is not the main business of the company. The owner of the company is an active in networking with small businesses and has good connection with government agencies.

# Governance analysis of contract

Rules and regulations

Actors that set the rules

Table 2. Role of stakeholders in the peanut commercialisation contract Tabela 2. Rola interesariuszy w umowie komercjalizacji orzechów ziemnych

The Project Management Unit include members of the Provincial Department of Agricultural and Rural Development and World Bank and its project staff W skład Jednostki Zarządzającej Projektem wchodzą członkowie Działu Prowincjonalnego do spraw Rozwoju Rolnictwa i Terenów Wiejskich oraz Bank Światowy i jego pracownicy związani z projektem	Provide technical (management) supports for Company X in this case) and a maximum support of 20 000 USD for two years for branding, exchange, and technical training for farmers and quality monitoring. Zapewnienie wsparcia technicznego (zarządzanie) dla Firmy X (w tym przypadku) oraz maksymalne w wysokości 20 000 USD przez dwa lata na budowanie świadomości marki, wymianę oraz szkolenie techniczne dla rolników i kontrole jakości.  Support Dien Thinh Cooperative also in terms of management know-how, training and financial support for management of the cooperative in implementing the contract.  Wsparcie dla Spółdzielni Dien Thinh pod względem zarządzania know-how, szkolenia i wsparcie finansowe zarządzania spółdzielnią we wdrażaniu kontraktu.
Farmers Rolnicy	160 farmers, members of Cooperatives produce on 240 ha out of the total 432 ha peanut monoculture of the commune. 160 rolników, członków spółdzielni produkuje na 240 ha spośród ogółem 432 ha monokultury orzechów ziemnych w gminie.
	Receive subsidies for 40% of production cost and not exceeding 200 000 USD, which is reimbursed through the Cooperatives. Otrzymują dotacje na 40% kosztów produkcji, nie przekraczając kwoty 200 000 USD, która jest zwracana przez spółdzielnie.
	Obliged to follow the growing specification. Zobowiązani są przestrzegać przepisów dotyczących uprawy.
	Obliged to sell to Company in the Alliance, or else will be withdrawn from the project and pay back the investment Zobowiązani są do sprzedaży na rzecz firmy w aliansie pod rygorem wykluczenia z projektu i zwrotu kosztów inwestycji
Company X Firma X	Enter an agreement to work in the Alliance with Dien Thinh Cooperative under support project management unit (PMU).  Zawiera umowę o pracy w aliansie ze spółdzielnią Dien Thinh przy wsparciu jednostki zarządzającej projektem.
	Sign a contract for producing and selling/buying, with the terms and conditions are discussed with farmers and agreed by PMU.  Podpisuje kontrakt na produkcję i sprzedaż/kupno na zasadach i warunkach omówionych z rolnikami i zatwierdzonymi przez jednostkę zarządzającą projektem.
	Provide technicians to support farmers in production. Zapewnia techników wspomagających rolników w produkcji.
Dien Thinh Cooperative Spółdzielnia Dien Thinh	Cooperatives with back up of the Commune, mobilize farmers, ensure that the production is followed the technical requirements, organize the subsidy reimbursement and organize the selling to Companies. Spółdzielnie przy wsparciu gminy mobilizują rolników, upewniają się czy produkcja przebiega według wymogów technicznych, organizują zwrot kosztów dotacji i sprzedaż na rzecz firm.

### Contract formation

Company X expressed an interest to join in the ACP project and selected in 2010. The Project Management Unit played a role in selecting the cooperative. There was no clear answer why Dien Thinh Cooperative was chosen, as the representative from District People Committee suggested that the other Cooperatives in the district also had the same experience in management.

The stakeholders reported that there were meetings in which farmers were able to discuss and clarify the condition of the project support and contract. A business plan, also served as an application for the grant of the Alliance was developed and approved. According to this business plan, the significant investment from project aimed to formalise and strengthen the connection between farmers, cooperative and the Company, to promote a more sustainable farming practice compliant with Viet Gap (Vietnamese Good Agricultural Practices) conditions and to improve business capacity of the Company thus, achieve the spill over effect for farmers. The Company hired University staff to provide the extension support for farmers and this cost was borne by the project.

The Contract itself was a part of the broader Alliance agreement framework. It was signed between Dien Thinh cooperative and the Company, witnessed by the Commune Authority. A list of the participating households was attached to the contract. The Cooperative also signed an agreement/contract with individual household to reinforce the responsibilities of each household in the contract. The cooperative organised the collective buying of inputs (fertilizers, plastic row cover, pesticides) for their farmer members and some common materials such as the ploughing machine for common usage. Each participating household had a profile/ book to record the land area, the inputs they received. The cooperative also organised the application of reimbursement from the project and distributed back to participating members.

The local authority and farmers themselves appreciated the opportunity to receive direct support from the project, 40% reimburse for the input cost, more than having the opportunity to join in contract farming with the Company. Indeed, participating farmers refer to more to the arrangement as the project rather than the contract farming with the Company.

## Contract terms

According to the contract terms, there was no fix pre-specified date of delivery and place of delivery. These details would be discussed after 5 days of notification from the Cooperative to the Company. There was no minimum price in the Contract. The price at any point would be based the market price for each classification of peanut and had to be issued by the Price Setting Committee, with representatives of Cooperative, Company, Commune Authority and Project Management Unit. The negotiated price would be fixed for a period of 3 days. The contract mentioned a price premium of 1-2.5 USD/100 kg for farmers in the Alliance but it was unclear when this condition would be applied. In particular, it was stated that this premium could only be applied once the buying and selling in Alliance was stable.

The Company agreed to buy all the quantity that farmers produced, especially Type I. The farmers could sell Type II to the Company or the Company could suggest possible buyers for these produces. In practice, the price is set as the average price of 3 large buyers in the communes. There is a committee to decide the price. The Project Management Unit acted as the dispute resolving body in case of conflict.

People Committee (PC) at Commune level had played an important facilitating role in the contract under review. The PC at commune acted as an enforcement body to protect the rights and responsibilities of both parties in the contract. In addition, the Project Management Unit added another monitoring layer to the contract implementation. Finally, for understanding of the rules and rate of change of the rules, farmers remembered and referred more to the project, rather than the contract with Company X. Interviewed farmers however understood the rules.

## Enforcement

During the first year of the Alliance, the cooperation has been smoothly. The Company reported that it bought almost the same amount that was projected by the Alliance. The farmers experienced improvement in yield and quality of peanuts. The price paid by the Company was higher than the average market price for the high quality peanuts, however, this was also applied to non-contract farmers as well as the policy of the Company.

#### Services

Another assessment on whether the project would whether the contract farming would allow the Company to engage in small holders. For example, if the contract farming helps the Company to access to credit, it would be an incentive for them to initiate a contract farming and likely to expand their business to smallholders. However, even with the heavy subsidy and the high level of involvement of authority in this project to promote contract farming, the Company would not be able to access to credit. The risk in interest rate was born by the Company if they were to apply loan from the bank.

## Pro poor analysis of the impact of the contract

## **Economic**

Pricing mechanism and profit margin

With the contract, the farmers received access to agricultural inputs and equipment, particularly fertilizers, seeds, plastic row cover and plough machines. The interviewed contracted farmers shared that they experienced higher income, mainly due to higher yields, around 20%. The farmers also had more access to extensive extension services than non-contract farmers.

The farmers had their production risks covered in the contract, mainly with the project funding. In particular, the some coverage in case of calamity, pest and diseases were set in the project.

Access to market and marketing arrangements

The contract did not improve the access to market as the farmers had had previous marketing connection with the Company.

# Cost distribution and risk sharing

The transaction cost, in particular screening, monitoring, and quality management of the contract was born by the Company. As the contract was linked with the prevailing market price and did not specify the minimum price, the farmers and the Company were exposed to the same risk as without the contract. The contract theoretically provided the farmers some risk premium of 1 USD/100 kg when agreeing to sell their produce to the Company. However, this condition did not have much value, as it was not clear when the Company had to fulfil this obligation. In reality, the Company offered this premium anyway.

As the project financed some part of the input price, both farmers and the project bear the risk of the input price changes. The price setting committee was responsible to collect the prevailing marking prices to set the average benchmark price. Thus, the project bore this cost to acquire market information.

The contract reduced the cost of marketing for farmers and at the same time, gave some support to improve the marketing strategies for the Company. The potential risks from calamity were covered with the generous support from the project. Overall, the farmers were better off with the Contract but it was mainly due to the extensive subsidy from the project.

Agricultural production and management

Extension services and outputs quality and productivity

The extension service on producing according to Viet Gap practices to some extent helped farmers to use their inputs more efficient. The improved yields were the results that farmers appreciated. They were believed as the consequences of better husbandry/tending techniques and proper use of fertilizers and pesticides.

### Governance

Transparency of the contract (especially for price determination)

The strength of this contract was the participation of the Project Management Unit and the existence of the Price Setting Committee to present the interest of farmers in the contract. The highly structured of roles and responsibility of parties involved, which was possible with a large amount of subsidy from the Project, had protected farmers rights better.

Capacity building for farmer organization

The contract was not able to change the attitude of farmers and the Company in their mindset to partnership in business. Both farmers and the Company were interested in short-term gain rather than striving for the quality and reputation for their products. This is particularly dangerous as the Company is intending to develop their own premium product line.

The contract arrangement did not add value in strengthening the relationship between cooperative members and the Company as this had been established before. The Company had always been seeking to buy from the farmers of this cooperative before. The Company stated that without the project support, they would not sign up a contract with farmers but rather rely on their own way of creating credibility with farmers, thus, having reliable suppliers. They would not use the Price setting committee as they saw that their primary concern was the profitability of the Company, rather than serving the social responsibility as the Commune expected.

With extensive guidance from the Project Management Unit, equipment investment and the management fee covered by the project, the Cooperative had gained some improvement in its capacity, in particular, improved technical knowledge on Viet Gap practices and monitoring of farmers through training, financial management procedure and the concept of using individual logbook in monitoring. However, it seemed that the Cooperative only understood the concept of these management principles been but there was limited evidence shown that they had put it in practice. The logbooks and all the individual contracts, for example, were kept at the Cooperative Office, not by the farmers. The logbooks were used to record the amount of inputs distributed to farmers rather than for farmers to record and monitor their own farming activities. Concrete investment such as plough machines seemed to be one of the most mentioned investments by the Cooperative and its members. With this equipment, the Cooperative was able to support their members to save labour and time during soil preparation stage.

Even though the intention of the project was to set up a good example of cooperation between the farmers and the agribusiness, the extensive subsidy and benefits from this project would not be replicated by the agribusiness themselves. It is beyond of this study to assess the efficiency of the project investment. However, there were some evidences that some positive changes resulted from the subsidy, rather than the contract itself. The scope of change could have been better if the project was better designed. On the other hand, many of positive changes for farmers might not be realised if the Company has to bear all the cost in setting up the contract farming. For example, it is unlikely that the Company would invest in sustainable farming practice, as their clients do not require certification of Viet Gap or the testing result of chemical residuals in the produces.

Social, environmental, and developmental aspects

The impact of social aspects was not evidenced. For *environmental aspects*, the promotion of Viet Gap practices helped farmers to improve their soil quality. Regarding development aspects, the contract covered all farmers belong to the Dien Thinh Cooperative. There was no exclusion to small farmers if they were members of Dien Thinh Cooperative.

# **Case conclusion**

Taken away the extensive subsidy of the ACP project, contract farming by Company X is an example of failing contract farming as the contract itself does not generate the benefit for both farmers nor it was necessary. The contract is a caveat for the ineffective investment in promoting contract farming. Excessive subsidy and give-out does not motivate both farmers and the company to truly work together. In addition, for peanut kernel in Dien Chau where there is already a competitive market, contract farming was not important. Perhaps, the strategy of the Company, maintaining a good relationship with the farmers, by paying premium for high quality produces and becoming a reliable buyer seems to work better than bearing the transaction cost of managing the contract farming. If the Company finds a niche market that requires specification of peanut, such as Viet Gap, contract farming might be then the only way to ensure farmers comply with the specification. However, the Company needs to consider the transaction cost in implementing such contract farming.

The experience also suggested a gap that currently could not be taken by the farmer organisation and the Company. A facilitating body, in this case, like the project management unit might be useful to link the Company and farmers together with appropriate support. Small investment in shared working resources such as ploughing machines for the cooperative could be very effective in coordinating between cooperative members.

### COMPREHENSIVE ANALYSIS OF THE CASE AND DISCUSSION

The case represents the multi-partite model in Nghe An. A following comprehensive analysis and discussion for the case will be implemented to conclude the hypothesis of the study.

An important trigger for contract farming is the need of the business. Contract farming is a backward linkage that helps the company to have a stable supply. The large investment in developing a new product line makes CF more critical for the business of company. A Company with a long- term business plan is more likely to find the benefit of contract farming, as a form to establish the partnership with farmers.

Government subsidies provide leverage for the Companies to start with contract farming or for Company to expand their contract farming practice. In other word, government subsidies and policy support either cover some of the transaction cost or investment or share some of the risk of investment for the Companies to choose contract farming as part of their business model or to increase this practice.

While all companies have been able to mobilize farmers and set up their input zones with the political support from local government and respective agencies, the **role of government** in contract reinforcement especially People Committee at commune level, is noticeably weak. The rights of both farmers and Companies are not protected in the formal system. In particular, there is no mechanism and no instances when the People Committee engages in negotiating a better price term for farmers. The People Committee is also not effective in stopping opportunistic buying from other competitors.

Management skill of Agribusiness decides the level of success of the contract. Maintaining the relationship with farmers during the contract implementation in particular is the key. An effective way to improve the partnership between actors in the Contract is through supporting farmer organizations. From the cost perspective, empowering farmers enables the companies to transfer some of the transaction cost to farmers. This involves building up the capacity of farmers to work in groups so that they can provide mutual support, especially when labour resources are scare during harvesting time and the farmers can negotiate among themselves to manage the flow of inputs to the Company. In this case, these are the most critical contribution from development projects. In organizing farmers, both farmer leadership and group building are important. When the Company only emphasized on the village head to do the internal monitoring through commission incentive but not invested in setting up a system to empower participating farmers, the rate of farmers quitting the contract was higher.

An important factor that attracts farmers to contract farming is **the access to agricultural inputs and the technical extension support**. The Company can utilize the shadow price of inputs to attract farmers to contract farming. When the support is sufficiently large, as in case of Company X, it is a strong binding for the farmers to the contract and is an effective sanction. **Access to extension support** to help farmers increase

productivity particularly is seen as an intangible incentive and creates a strong commitment of farmers to the contract scheme. Farmers received both training courses and technical advice during their cultivating, thus improving productivity and quality for product and cultivation soil.

Contract farming might increase the **inclusion of small farmers** when the Company is likely to choose to work with farmers who have certain endowments, such as better quality soil, more experience in that particular crop. Besides, the evidence that contract farming help to improve **income** for farmers is not strong. In Nghe An, contracted farmers experience a higher income mainly due to significant higher yields.

In terms of price setting, contracted farmers have **not utilized the full capacity of Contract farming in protecting them from market volatility**. By agreeing to the market price, the contract farming only gives farmers a sense of security that their produces would be bought. It leaves to the Company X discretion when the market price falls. The practice of specifying an insurance price to support farmer livelihood are not guaranteed through current contract farming practice.

The Company only offers a single contract for all farmers. This reduces the cost for the Company in terms of monitoring the contract. However, Warning and So Hoo (2000) argued that a differentiated contract might benefit both firm and farmers. "Differentiated contracts might benefit the firm, and possibly the growers, in a number of ways. For example, if the firm has a relatively low cost of credit, it can structure the terms of a credit-providing contract so as to extract a poorer grower's risk premium. This might involve offering a credit-providing contract with a lower price for the final product, in addition to a contract with no credit that pays a higher price for the product. The smaller, more credit-constrained growers will opt for the credit-providing contract and the firm will extract the difference between its shadow price of credit and that of the grower".

Generally, all analyses and discussion mentioned above are presented briefly through the following Table 3. The table are also used to conclude the hypothesis and

Table 3. Summary of impacts of CF on small scale farmers Tabela 3. Zestawienie wpływu kontraktacji na rolników produkujących na małą skalę

	Peanut Kernel contract Kontrakt na orzechy ziemne	Testing hypothesis Hipoteza badawcza
1	2	3
Economic Ekonomiczny		
Pricing mechanism and profit margin Mechanizm cenowy i marża zysku	yes, to some extent tak, do pewnego stopnia	+
Access to market and marketing arrangements Dostęp do rynku i ustaleń rynkowych	yes tak	+
Access to agricultural input Dostęp do wkładu rolnego	yes, significantly tak, znacząco	++
Access to credit Dostęp do kredytu	no nie	

Table 3 - cont. / Tabela 3 - cd.

1	2	3
Agricultural production and management Produkcja rolna i zarządzanie		
Extension services Rozszerzone usługi	yes, significantly tak, znacząco	++
Farmer empowerment (technical and managerial skills) Upodmiotowienie rolników (umiejętności techniczne i zarządcze)	yes, significantly tak, znacząco	++
Outputs quality and productivity Jakość i wydajność produkcji	yes tak	+
Spill over on other crops Wpływ na inne uprawy	yes, to some extent tak, do pewnego stopnia	+
Governance Zarządzanie		
Transparency of the contract (especially for price determination) Jasność kontraktu (zwłaszcza w odniesieniu do ustalania cen)	yes, to some extent tak, do pewnego stopnia	+
Fairness of the governance scheme (flexibility/autonomy of the farmer) Sprawiedliwość systemu zarządczego (swoboda/ autonomia rolników)	not evidenced brak danych	
Capacity building for farmer organisation Budowa potencjału organizacji rolniczej	yes, significantly tak, znacząco	++
Social aspects Aspekty społeczne		
Gender effect and family labour Wpływ na płeć i pracę w rodzinie	no clear impact brak konkretnego wpływu	
Environmental aspects Aspekty środowiskowe	yes, to some extent tak, do pewnego stopnia	+
Development aspects Aspekty rozwojowe		
Equity and distribution of impacts Równość i podział wpływów	yes tak	+
Relevance with regional food security Istotność pod względem regionalnego bezpieczeństwa żywnościowego	unable to assess brak możliwości oceny	
Inclusion of the small farmers Włączenie małych rolników	yes, to some extent tak, do pewnego stopnia	+

Note: + positive impact, ++ significantly positive impact. Uwaga: + wpływ pozytywny, ++ wpływ znacząco pozytywny.

research questions. Benefits of small scale farmers are tested through detailed factors of aspects. It can be said that the hypothesis is accepted for four factors including Access to agricultural inputs, Extension services, Farmer empowerment (technical and managerial skills), and Capacity building for farmer organisation. Besides, some other factors only have positive impact but not significant, showing that the hypothesis is slightly supported. The other factors are not influential so the hypothesis is rejected for those factors.

### CONCLUSION

This paper focuses on analysing the impact of contract farming on small scale farmers. After literature review, the paper set up the overall hypothesis that assumes a positive relationship between contract farming and benefits of small scale farmers. This study applied deeply case study approach with one case investigated in province Nghe An. By analysing and discussing the results following the dual methodologies Governance and Institutional Analysis and a Pro-Poor Analysis of the Contract, it is concluded that the hypothesis is supported with several factors, especially Access to agricultural inputs, Extension services, Farmer empowerment (technical and managerial skills), and Capacity building for farmer organisation. Before proceeding to the recommendation part, the following key success factors are extracted from findings.

# **Key success factors**

Some of the key factors or ingredients for mutually beneficial agreements to improve the livelihood of the small scale farmers can be identified and generalized from the case, namely relevance of commodities, format of the contract, the support of governmental agencies, support of a development project, provision of access to credits and agricultural inputs as incentive for farmers with fair price condition:

Firstly, the relevance of commodities dictates the success of contract farming. Contract farming seems to work better with commodities that have high value in the later chain or commodities with some special specification. When the market is already developed with competitive buyers and no product specification is needed, such as the case of peanut kernel, the contract is less likely to succeed.

The support from government is quite critical, ranging from general sector development policies and certification of the contract. In addition, the support from development projects include farmer coordination and technical support or acting as an additional party between Company and Farmer organisation have added value to involved parties. These later supports have their own merit, particularly in terms of its hand-on, applicability to the local context.

The good governance of the Company is another factor. It is the key to efficiency and effectiveness of a contract. Agricultural extension services by the company are provided in form of training, ongoing technical advice.

From the producer side, good collaboration and ability to organise between farmers are also importance. It helps to reduce the transaction costs for both parties. Where there

is more support for farmers to organize and empower them in the contract management: through training, support the group formation and the group management, the contract is more likely to succeed.

A contract farming is more likely to succeed if it can draw on farmers to join with distinctive advantage to non-contractual arrangements. Some upfront incentives for farmers such as credit scheme, access to agricultural inputs can be used as pre-condition for farmers to join in an alliance of production. With these initial supports, the linkage or binding between the Company and the farmers are stronger. Another extreme is subsidy to join. However, it may not sustainable practice.

A fair price setting process is likely to be one successful factor. In this process, it is critical that a committee to decide the price with the participation of farmers, the company and an arbitration body protects the rights of farmers. However, given the price volatile, the price benchmarking should be flexible and enable to make quick decision. A company might consider differentiate contract conditions.

### Recommendations

### For National and Local Governments

While the study is not focused much on soliciting recommendations for companies, there are some suggestions emerging, particularly relating to the modifying Decision 80/CP-2002. The most critical recommendation is to make Decision 80/CP-2002 mandatory rather than suggestive as it is now. While more thorough consultation is needed to advocate for a change at a national level, at the provincial level, contract farming should be more integrated with budget lines and appropriate financial incentives to encourage agribusiness to involve. Access to credit for agribusiness that promote the selling and buying of commodities through contract is a critical factor to leverage the development of agribusiness.

To protect the farmers, more training and involvement at district and commune levels are needed. Currently, there is a significant gap in supporting the marketing of outputs for farmers. Most of the support is currently in production and in crop techniques if there is any. The extension practice should be changed to include other aspects of production such as coordination between farmers to increase productivity and reduce transaction cost.

# For Development Agencies

The cases highlight the potential of an external body like a NGO to facilitate the process of contract farming. This can help to ensure that the farmers are represented and protected. Some of the intervention points might include:

**Advocacy work** – based on the experience from the field and successful cases, development agencies can support the process of modifying Decision 80/CP-2002. Advocacy point can also be in development strategies of sectors and planning at provincial and district to ensure contract farming, as a market arrangement is included with supporting policies. Supporting government at different level in basing their planning and development on value chain and market analysis of potential crops would benefit farmers. Coordination with other NGO network or research institutes is crucial in this work.

**Empower local authorities and local service providers** – intervention might include supporting local authorities to understand the implication of contract farming for farmers and planning of at the local level and identify situation where interests of involved parties, particularly farmers are affected.

Empower farmer groups and improve their skills – Agricultural technical knowledge provides the short term wins for farmers. In the long run, activities such as technical support in setting farmer group, building up skills in negotiation, helping farmers to understand the impact of contract farming, analysis of market, financial management and etc are crucial to empower farmers.

**Good Company Governance** – the Company will receive support indirectly through the work of the NGO with farmers as it represents a cost saving for the Company. However, this could be used as a mechanism to bring in Company to implement good governance practice in their partnership with farmers. At the minimum, support to increase the information sharing between company and farmers will help to bridge the gap.

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# KONTRAKTACJA I JEJ WPŁYW NA DOCHÓD I UTRZYMANIE ROLNIKÓW PRODUKUJĄCYCH NA MAŁĄ SKALĘ NA PRZYKŁADZIE WIETNAMU

Streszczenie. Kontraktacja ma być jednym ze środków ułatwiających uczestnictwo rolników w komercyjnej produkcji rolnej, dodając większą wartość do produktów rolnych. Jednakże w Wietnamie wykazano zróżnicowane dowody dotyczące dobrze znanych zalet kontraktacji u rolników produkujących na małą skalę. Są to: obniżone koszty dostępu do rynku, kredyt na uzyskanie dostępu, otrzymywanie informacji o okazjach na rynku lub nowych technologiach, zakup pewnych środków i dostęp do rynków produktów oraz zmniejszenie wahania cen. Celem niniejszego badania była analiza wpływu kontraktacji na rolników oraz ustalenie linii postepowania w celu ułatwienia wejścia rolnika w korzystne związki kontraktacyjne. Oprócz przeglądu literatury przeprowadzono intensywne badanie przypadku praktyk kontraktacyjnych z towarem. Wyniki badania mają bezpośrednie znaczenie dla pracy agencji i organizacji promujących dobrobyt rolników o nie-

wielkim stanie posiadania poprzez praktyczne wsparcie w pracach polowych lub wsparcie w linii postępowania.

Slowa kluczowe: rolnictwo kontraktacyjne, wpływ, rolnicy, utrzymanie, studia przypadków

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