Pro-Poor Livestock Policy Initiative
A Living from Livestock
Research Report

May 2005

# Smallholder Contract Farming of Swine in Northern Viet Nam: Study Design

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## 1. Background

Against a backdrop of steady increases in human population, domestic market liberalization, global openness, and urbanization, the demand for livestock food products has soared in the developing world. This demand-led growth for animal derived food has been accompanied by the proliferation of large-scale, often vertically integrated livestock production units in or around urban centres. These operations are frequently owned and run by agribusinesses and have become increasingly important for the supply of livestock products both locally and globally (Delgado *et al.*, 2003; Tiongco *et al*., 2004).

Livestock development has been identified as an effective agricultural diversification strategy for Viet Nam (IFPRI 2001). However, in a scenario of increasing globalization, the livestock sector is faced with both opportunities and threats that could have implications for rural poverty reduction. In Viet Nam, there is a growing trend toward the development of large commercial livestock production systems for pigs intended for the export market (Tung *et al*., 2005). This is supported by policies that provide investment incentives, as well as importation of breeding animals and veterinary inputs largely by state-owned enterprises. On the other hand, a large proportion of livestock production in Viet Nam still comes from smallholder production systems that generally have limited access to input supplies and services (ibid). Thus, there is a potentially critical inconsistency of current policies with the ultimate objective of reducing poverty.

Appropriate institutional arrangements that assist in keeping smallholders in the game, at least in the near future, will be of utmost importance if the twin goals of poverty reduction and equitable distribution of the gains of economic growth are to be achieved in Viet Nam. This will require empirical investigation of the impacts of institutional innovations such as contract farming to inform policymaking and development planning.

## 2. Objective

Understanding how different forms of contract farming for swine can overcome transaction cost barriers that are net losses to both buyers and sellers, and fairly distribute the risks, costs, and returns to contract farming between small-scale/poor producers and integrators, will be essential to define the policy environment required to nurture these emerging forms of private sector investment in the rural poor. The risks of market-oriented livestock production and benefits inherent in vertical coordination of the contract farming type are summarized in Table 1.

**Table 1**: Risks of livestock production and benefits of contract farming.

| Constraints to / risks of market-oriented livestock production | Benefits of contract farming to | |
|---|---|---|
| | Integrator, buyer, trader | Contract grower |
| No capital | Investment opportunities in livestock; exemption from construction of on-farm facilities | Access to capital |
| Loss of capital | Incentive to contract farmer for longer term commitments | Protection against loss from market risks |
| Loss of animal | Protection against careless labour | Protection against diseases |
| Quality of animal | Assurance of produce | Access to better stock |
| Reliability of output price | Reliability of supply | Reliability of outlet |
| Quality & price of inputs | Quality gain for integrators | Quality assurance, assurance of supply; credit |
| Timing/availability of outputs | Volume and phasing of outputs are according to agreement | Ready outlet for output at designated schedule |
| Timing of output sales | | Timely outlet |
| Labour supervision | Relation with farmer is not one of a hired labour | Farmer manages production on his own |
| Land tenure | Access to land | |
| Environmental regulation | Avoid legal responsibility for pollution | |
| Knowledge deficit | | Access to extension |
| Exposure to animal diseases | Assurances about health status condition of animals | Access to healthy seed stock and to veterinary services |

Engagement in contract production does not necessarily automatically lead to superior positions for both parties. There are also risks to engaging in contracts. For example, on the part of producers, being bound to a contract means that for the duration of the agreement, autonomy is given up, and producers cannot just sell output to take advantage of periods when market prices are more attractive than contracted prices or growing fees from the integrators. On the part of integrators, the enforcement of contracts may necessitate the provision of additional resources to see to it that contract producers are using production inputs as they are supposed to and that the proper production practices are being followed.

The research on ‘Contract Farming for Equitable Market-Oriented Smallholder Swine Production in Northern Viet Nam’ seeks to characterize and quantify the ‘true’ costs and benefits of contract farming of swine in Northern Viet Nam. The ultimate objective is to understand barriers to participation of smallholders in contract farming and other marketing arrangements and to identify a set of policy and intervention options for the facilitation of profitable market-oriented livestock farming partnerships.

## 3. Expected Outputs

The envisaged research outputs are:

1) a comprehensive characterization and quantification of the true costs and benefits of contract farming and other organizational arrangements in overcoming transaction costs;
2) a clear understanding of the main determinants of participation of smallholder producers in contract farming and other organisational arrangements; and
3) a set of policy and intervention options based on the assessment of the efficiency and efficacy of contract farming and alternative institutional arrangements in the promotion and facilitation of profitable livestock farming partnerships.

To arrive at the above, the research will:

- compile a comprehensive catalogue of different forms of existing contracts and organizational arrangements for pig (and piglet) production, differentiated by distribution of risks and benefits across contracting parties;
- identify and compare production and transaction costs of pig (and piglet) production under the identified smallholder contracts and other institutional arrangements with those in independent smallholder and intensive livestock production;
- identify and compare the social impact of livestock farming under the identified smallholder contracts and institutional arrangements (particularly in terms of participation

of relatively poorer households and women) compared to independent smallholder livestock farming and larger scale intensive livestock production; and

- assess and evaluate the broader institutional and policy environment to guide and facilitate the use of promising smallholder contracts and other institutional arrangements for pigs and piglet production, and of other components of the institutional environment (e.g., public policy, public goods, governance) that promote or prevent the use and spread of such market-oriented institutional/organizational arrangements in Viet Nam.

## 4. Methods

Focus group interviews of integrators and Ministry personnel will be made with respect to all forms of contract farming of pigs within three hundred kilometres of Ha Noi city limits. Data will be collected about the forms of contract, numbers of farmers and integrators involved, and typical farmer and integrator characteristics.

In addition, farm and institutional level data will be collected from at least three distinct provinces of Northern Viet Nam where contract farming of swine is being practiced. Farm budget data on swine production and farm income sources will be collected from 50 swine contract farmers in each site. In addition, rapid appraisal methods will be used to collect similar data from 50 independent swine farmers in each survey site for comparative purposes. This will lead to a consolidated sample of approximately 300 pig farmers, consisting of 150 contract producers and 150 independent pig farmers.

Market chain information will also be collected using structured interviews among 30 traders and 20 market-mediating institutions/organizations to obtain information on costs and market prices along the supply chain, transport costs, other transaction costs, traders' selling prices, retail prices, grading of outputs, differentiation of products, marketing margins and value-addition, and strategies for selecting contract farmers.

The data collected from the focus groups interviews and farm surveys will be analyzed empirically and results will be presented in a consolidated report, to be discussed and validated at a workshop in Hanoi with policymakers, the private sector, farmer groups and other stakeholders.

## 5. Research Partners

The research will mainly be conducted by researchers from Hanoi Agricultural University but will involve staff from both ILRI and IFPRI. Scientific oversight will be provided by ILRI-IFPRI. The principal collaborators and their respective institutions are:

- *Christopher Delgado* – Economist, Programme Director, ILRI-IFPRI Joint Program on Livestock Market Opportunities
- *Achilles Costales* - Livestock economist, FAO Pro-Poor Livestock Policy Initiative (PPLPI)
- *Nguyen Tuan Son* - Agricultural economist, associate professor at the Hanoi Agricultural University, Department of Econometrics, Faculty of Agriculture and Rural Development
- *Lucila Lapar* – Economist, ILRI SE Asia
- *Marites Tiongco* – Agricultural economist and Postdoctoral Fellow, IFPRI

## 6. References

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## 7. Contacts and Further Information

This research report is an excerpt from the full research proposal submitted to PPLPI. For additional information, please contact:

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