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PRODUCTION AND MARKETING OF INDIGENOUS PIG BREEDS IN THE UPLANDS OF VIETNAM AN ECONOMIC ANALYSIS IN SON LA PROVINCE

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7 Summary, Conclusion, and Policy Recommendations

This research was aimed at analysing the development and the market efficiency of indigenous Ban pigs in the mountainous areas of Northern Vietnam. It also focused on identifying the importance of Ban indigenous pigs as well as marketing arrangements among producers and traders in the supply chain to pig production economics and household income. In addition, production economics of Ban pigs were evaluated in a comparison to improved pigs.

7.1 Summary

The markets for Ban pigs in Son La are in a recent development. Ban pigs have not only been marketed within the province but also beyond regional boundaries. Traders have been increased with the emergence of traders specializing on Ban pigs. This is a good sign for the development of markets for indigenous pigs in the uplands. However, indigenous pork is destined for gourmet restaurants and high-income consumers.

The supply chain for Ban pigs is mainly characterized by locality and geographically short distance with limited participation of many actors. The marketing channels have been involved by producers, collectors, traders, retailers, consumers, and sometimes middlemen. The supply chain for pigs is unsystematically organized; actors engaging in chains operate their trading activities at small scale; specialization characteristics of actors are low, i.e. all traders are also slaughters; no collectors in very remote regions; and the integration among producers are rarely found. The quality control system is not clear. Moreover, prices are always set up by traders and retailers; farmers have no effects on prices in the local market.

Ban pigs yield a higher farm gate price than LWxMC pigs. The efficiency of Ban pig markets is lower than LWxMC markets since net marketing margins in trading per kg of Ban pigs is higher than in trading LWxMC pigs. Net marketing margin is unequally distributed among actors within the supply chain. Ban pig keepers receive a smaller share in marketing margin than LWxMC keepers, which means that farmers producing Ban pigs got less remunerative price for their pigs than those producing LWxMC due to higher marketing cost.

Contracts and marketing agreements are not popular in the study sites. Contracts generally rely on informal basis of trust, satisfaction, and power dependence. Only a few pig keepers have established trading relations with their buyers. The long-term trading relations can limit risks in terms of prices for local producers. Comparing households keeping the same genotypes, producers with trading relations often achieve higher farm gate prices than those without trading relations. In addition, reliable information on time payment, exact scale and lower transaction costs were also benefits from the relationship. Ban pig keepers, however, depend not so much on preferred traders when compared to those keeping Mong Cai pigs. Due to the high level of competitiveness for indigenous pork in the market, Ban pig keepers find easy to choose other trading partners at any time. Most of households are not permanently locked on any trading arrangements.

An analysis on up-stream relationship among supply chain actors shows that in order to secure the quantity as well as the quality of products, traders concerned more on building relationships with their trading partners. Ban pig traders depend more on farmers and collectors they consider as their trading partners than other pig traders. In general, except producers, other actors in the supply chain have set up close marketing arrangements among each other. As trading relations are based on the principle of mutual benefits, it would be further explained by the motivation of setting up trading relations among actors in the supply chain.

The long-term relationship can limit difficulties in pig trading for local households. It can reduce some constraints in pig trading that farmers normally face such as unstable farm gate price, insufficient information on prices, and weak bargaining power.

Further investigation focuses on the evaluation of production economics between the two genotypes. Ban pigs yield a higher economic efficiency than Mong Cai pigs. While Ban pig breed is preferable and bring lower yield under unfavorable conditions, Mong Cai breed prove to bring higher yielding in the condition of good management.

In pig production, lack of capital, lack of production technique, maize and cassava shortage in dry seasons were major constraints in pig production. In addition lack of village veterinary staff was also one of the constraints.

The integration of breeds and trading relations makes a positive contribution to pig production and household income. Trading relations can increase gross margin per fatterer

of Ban pig keepers. Ban pigs, however, have no impacts to per capital household income. In contrast, the integration of Mong Cai breeds and trading relations can improve household income for households keeping this genotype.

7.2 Conclusion and Policy Recommendations

Encouragement of pig smallholders in the uplands to participate in the economic development process and in the food market has been targeted in recent years. This aimed at preventing smallholders from being marginalized and helping poor households. Advantages of keeping indigenous breeds are confirmed in marketing and production perspectives. However, the market efficiency for indigenous pigs is low in comparison with that in the lowlands, farmers still get stuck in constraints in pig production. The challenges of how to increase the market efficiency and improve production and how to maintain and strengthen the existing trading relations are posed for the province authorities. In order to develop the efficient pork market system, strengthen existing trading relations, improve pig production, and most important preserve indigenous pigs, actions in the following areas should be implemented.

Policy Recommendations on marketing issues

- Systematic contract farming arrangements as a promising approach: In the study sites, marketing arrangements exists spontaneously and unsystematically among supply chain actors. In these arrangements, contract farming especially on Ban pigs should be encouraged and closely associated with supply of credit, inputs, technical information and also marketing information for local producers. By doing that, trading relations will be maintained and strengthened.
- Marketing cooperatives: The study shows that no integration among local producers related to marketing issues of pig trading is found. Therefore, consideration should be put on marketing issues in connection with social associations within villages or communes. Information on prices can be provided by marketing cooperatives or exchanged among members. The bargaining power of farmers will be improved.

- **Price stabilization program:** In fact, the government does not interfere in price formation in the local pork market. The appearance of a price stabilization program can reduce price instability due to changes in supply and demands over time.
- **Local mass media programmes for each locality:** Marketing information including market prices and changes in supply and demand should be disseminated weekly or daily so that farmers have opportunities to access market information and increase their bargaining power.
- **Improvement of road infrastructure:** Better road network in the upland areas will help poor farmers to access to market. Better road networks will also lower marketing costs, which reduces net marketing margins for actors in the supply chain and increases the market efficiency.
- **Control of pork quality:** Standard slaughterhouses owned by the district need to be constructed in the locality. The quality of pork supplied to the market will be easier controlled as soon as pigs are slaughtered in slaughterhouses.
- **Close integration between indigenous pig producers and traders in the lowlands:** This integration should be strengthened by participation of organizations at the district level in order to ensure both quality as well as quantity of products. The quality of Ban pigs should be stated in mass media in order to gain the interest of entrepreneurs to invest in Ban pig marketing.

Policy Recommendations on production

- **Organization of credit program:** Credit policy should focus on providing capital at special interest rates for local producers in order to develop pig production. In the implementation of credit policy, poor farmers need to be given a priority.
- **Training courses on technical transference** should be organized monthly by the Agricultural Extension Department at the district level. Additionally, each village need to have a veterinary staff.
- **Maintenance of Ban pig preservation program:** Benefits of keeping Ban pigs and Ban pig trading should be explained to local farmers. In addition to the production

development of exotic and improved pigs, Ban pigs should be kept as a diversified genetic source to satisfy the increasing demand by consumers.

The above suggested measures should be implemented in a close association. The separated implementation of any measure may bring unexpected results in the process of market development for Ban pigs and fail in Ban pig preservation program.

7.3 Further Research

Although this study indicates benefits from Ban pig trading due to an increasing demand within both in Son La and the lowlands, it has not clearly shown attributes of products required by consumers. Reasons why Ban pigs are destined for gourmet restaurants and reasons why only a small number of Ban pigs are marketed in the lowlands have not been indicated. Further research on preferences of consumers for indigenous pigs will give an adequate answer to these questions. In addition, a detailed study on institutional mechanisms in marketing issues in order to involve small farmers in Ban pig production for markets beyond regional boundaries should be explored.