



## The growing shortfall in Vietnam's domestic supply of pork: Significance and policy implications

### Key points

- Pork is an important component of the Vietnamese diet. Since its market reforms, Vietnam's domestic production and consumption of pork have risen substantially.
- Nevertheless, in recent years Vietnamese demand for pork has grown at a faster rate than its domestic supply. This has resulted in a steep rise in Vietnam's pork prices. The fact that most Vietnamese do not want to purchase imported pork because of their strong preference for fresh (warm) pork has also contributed to the rising pork prices in Vietnam.
- This concerns the Government of Vietnam which is searching for ways to increase the domestic supply of pork.
- Households keeping few pigs are the main source of Vietnam's pork supply. Some policymakers believe that these households are inefficient and an obstacle to expanding Vietnam's pork supply.
- These policymakers argue that the government should favour larger commercial pig producers on various efficiency grounds and that these producers can fill the shortfall in the domestic supply of pork.
- While small household pig producers have limited capacity to increase their supply, they are often low-cost producers because they utilize inputs that would otherwise be unused or under-utilized. They are less reliant on imports of pig food than are large producers.
- A combination of small household producers and large pig producers is most efficient for Vietnam at this stage of its development. Efforts should be made to increase the economic efficiency of both small and large producers.
- More attention could be paid to constraints on the supply of domestically produced pig food and improving its utilization because pig food is the major cost in pig production in Vietnam.

### Introduction

Following Vietnam's market reforms, its domestic production of pork and its per capita consumption of pork have risen substantially<sup>1</sup>. Vietnamese demand for pork has risen due to higher incomes, an increasing population and growing urbanization. Vietnam's increased pork supply occurred as a result of an increase in its stock of pigs and greater pork yields, the relative importance of which has varied<sup>2</sup>. However, at least since 2000, Vietnam's domestic supply of pork has grown more slowly than its demand for pork and there has been a substantial rise in the real price of pork. This has happened because Vietnamese consumers have strong and persistent preference for fresh (warm) pork<sup>3</sup> and therefore, most avoid imported pork. There are natural barriers to pork imports and so the rise in pork prices had not been moderated by imports<sup>4</sup>.

Given the importance of pork in the diet of Vietnamese, this trend is of concern to the Government of Vietnam. Some policymakers think that the main problem is the inefficiency of small household suppliers of pigs and believe the answer to the problem is to expand production by larger-sized commercial producers<sup>5</sup>. However, at this stage in Vietnam's development, small household producers still make an important contribution to Vietnam's supply of pork – they account for about 90% of supply. In many cases, their costs of production are lower than can be achieved by larger commercial producers because they utilize inputs that otherwise may be unused or under utilized. They are also much less reliant on imported pig food than are large commercial producers.

In the current situation, ways should be explored to reduce the cost of production for both household and non-household producers. Attention should be given, for example, to increasing the supply and reducing the cost of domestically produced pig food and utilizing available supplies more efficiently.

**Box 1: The steep rise in Vietnamese pork prices**

The real price of pork in Vietnam has risen rapidly in recent years. According to data in the Statistical Yearbook of Vietnam, 2008 (p. 471) the producer's price index for products from domestic animals (mainly pigs and cattle) has increased at a faster rate than that for all other categories of agricultural products, and this increase has accelerated. Between 1995 and 2008, this index increased by 174% and between 2000 and 2008 it rose by 148.5%. That means it more than doubled in these periods. The producer's price index for agricultural products gives a measure of the real prices (excluding taxes and levies) which farmers received for their products when they sold them to consumers. Also note that the producer's price index for agricultural products has risen in recent years at a faster rate than the general price index. Therefore, agricultural goods have become more expensive in relation to other goods.

**Box 2: Data sources and methods**

The results reported in this part of the research output for the Australian Centre for International Agricultural Research (ACIAR)-funded research project, Improving the competitiveness of pig producers in an adjusting Vietnam market, are based on research reports prepared by the Centre for Agricultural Policy (CAP) and the International Livestock Research Institute (ILRI) in connection with this project, published data of the General Statistical Office of Vietnam, and other published materials (including those of the author) and analysis, including the use of concepts developed in economics.

**Table 1.** Preferences of sampled Vietnamese households for pork in comparison to other types of meat (including fish and seafood)

Type of meat	Urban households		Rural households	
	Score	Rank	Score	Rank
Pork	8.83	1	8.04	2
Chicken	8.05	2	8.16	1
Beef	7.75	3	7.90	3
Fish	7.44	4	5.51	4
Others	Except for seafood, have a much lower score			

Source: CAP-ILRI consumer survey data

**Results**

*The persistent strong preference of Vietnamese consumers for fresh (warm) pork*

The CAP-ILRI survey of urban households in Hanoi and Ho Chi Minh City and a sample of rural households reveals that pork is the preferred type of meat for urban households, and one of the two most preferred types for rural households (see Table 1). This preference is persistent and there is evidence that it existed at least a decade ago. Furthermore, on average, pork accounts for the largest proportion of expenditure on meat by households – more than a third in urban and rural areas (see Table 2). One important finding of the CAP-ILRI meat consumer survey is that Vietnamese consumers have a strong preference for fresh pork, and an aversion to chilled, frozen and processed pork. As a result:

- Vietnamese consumers do not like to buy pork from supermarkets and prefer to buy it from traditional market outlets<sup>6</sup>.
- They avoid imported pork because it is of necessity, chilled, frozen or used in processed pork products. Thus, most consumers demand domestic pork.
- They buy pork frequently and do not store it for long.
- These tastes probably result in pigs being slaughtered close to retail markets and limited transport of pork from rural areas to large cities.

**Table 2:** Percentage of household meat budget spent on different types of meat

Type of meat	Urban households		Rural households	
	%	Rank	%	Rank
Pork	34.1	1	38.2	1
Beef and Carabeef	28.0	2	7.2	4
Fish and Seafood	20.0	3	27.2	3
Poultry	17.7	4	27.3	2
TOTAL	100		100	

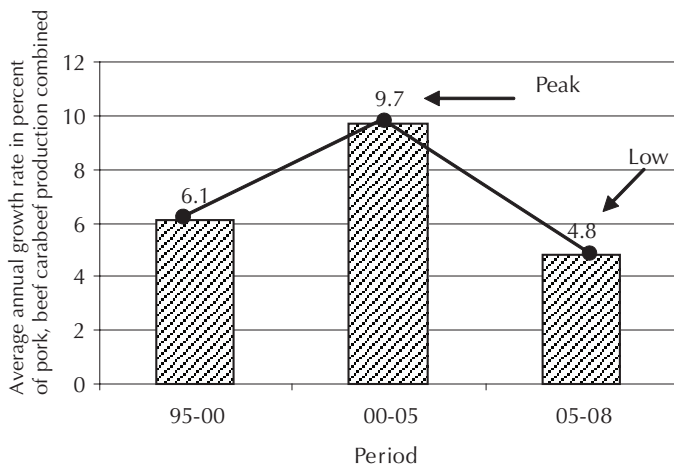
Source: CAP-ILRI consumer survey data

*Vietnam's supply of pork is growing more slowly than the demand and pork prices are accelerating*

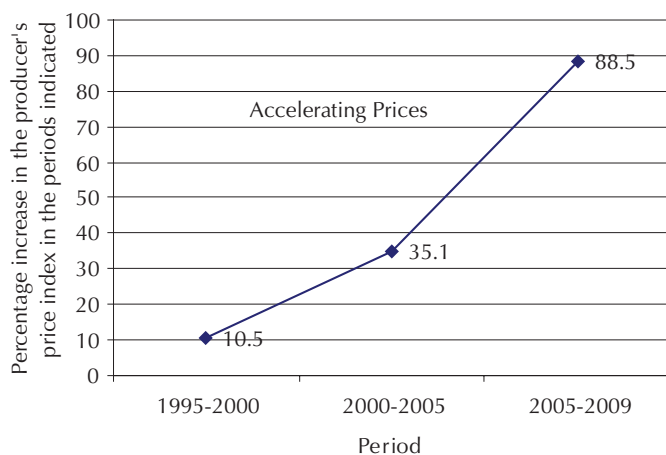
Vietnam has more than doubled its volume of production of pork since 1995. This has been due to an increase in its stock of pigs and increased pork yields. However, Vietnam's population of pigs peaked in 2005 and was reduced in the period 2006-08<sup>7</sup>.

The following trends can be noted:

- Annual output of pork, beef and carabeef combined grew at 6.1% per year in the period 1995–2000, accelerated to 9.7% per year in the period 2000-05, and fell back to 4.8% per year in the period 2005-08 (Figure 1). Thus, the growth rate of production is no longer being maintained.
- The increase in the real price of pork, beef and carabeef combined has accelerated. It rose by 10.5% in the five-year period to 2000, by 35.1% in the next five-year period and by 88.5% in the three-year period to 2008 (Figure 1). This indicates that the increased supply of pork has failed to keep pace with rising demand.



**Figure 1:** Percentage increase in the index of the volume of production of pork, beef and carabeef combined in Vietnam for the period between 1995 and 2008.

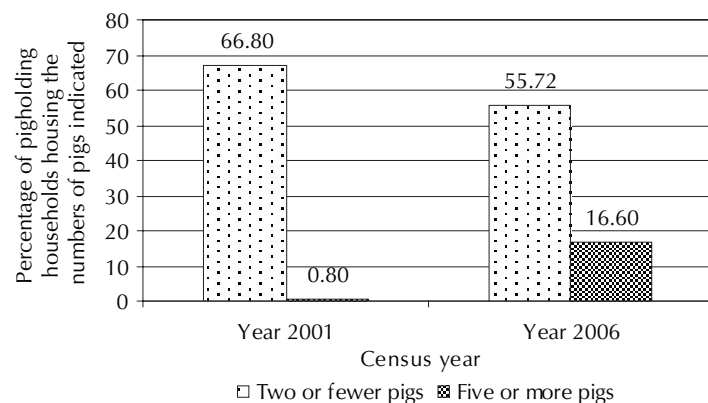


**Figure 2:** The accelerating increase in the real price of pork, beef and carabeef combined based on the producer's price index in the Statistical Year Book of Vietnam, 2008 (p. 471). There is a failure of increased supply of these meats to match rising demand.

### Small household producers are important suppliers of pork and efficient producers

Small households rearing pigs are a major source of pork supply in Vietnam and on the whole, they make an efficient contribution to Vietnam's pork production given its present stage of development<sup>8</sup>. That is not to say that the efficiency of their production cannot be increased.

- Household pig producers still supply about 90% of Vietnam's pork and account for around 90% of its pig stock<sup>9</sup>.
- The number of household producers is declining, their proportionate contribution to pork supply is slowly falling<sup>10</sup> and the average size of household pig herds is rising (see Figure 3).
- In comparison to larger producers, most households raising pigs in Vietnam play a cost-effective role in the supply of pork because:
  - They employ household labour (especially female labour) that otherwise is likely to be unemployed or under-employed.
  - They utilize pig food available from the household or locally<sup>11</sup> that otherwise may not be utilized or be used for lower value alternatives.
  - They are less reliant on imported pig food than are larger commercial producers.
- The number of household producers of pigs can be expected to continue to decline with Vietnam's economic growth but for some time they will be an important source of pork supply for Vietnam<sup>12</sup>. They should not be neglected in policies designed to increase Vietnam's level of pork production<sup>13</sup>.



**Figure 3:** Most Vietnamese pigholding households keep very few pigs but on average the size of their herds is slowly rising, as is illustrated. Although not shown, the percentage of pigholding households with 21 pigs or more rose from 0.3% in 2001 to 1.75% in 2006.

## Conclusions

The following are the main conclusions that can be drawn:

- As a result of Vietnam's economic growth and the strong preference of Vietnamese for fresh pork, the rising demand for pork has outstripped its increasing supply. The result has been an upward trend in the real price of pork which has started to accelerate at a worrying rate.
- Given the importance of pork in the diet of Vietnamese and their strong preference for it, the trend is a policy concern. However, the view that household pig producers are to blame for the situation because they are inefficient seems to be misplaced at this stage of Vietnam's development. It should also be borne in mind that household pig producers have made a substantial contribution to increasing the level of Vietnam's pork production in recent decades.

## Implications for policy and interventions

### Policy implications

- A combination of household and large commercial producers of pigs is likely to be efficient in meeting Vietnam's demand for pork in the present stage of its development<sup>14</sup>.
- The major cost for pig producers is pig food and its rising price seems to be a major restriction on expanding pork supply. Particular attention should be paid to increasing Vietnam's supply of pig food, reducing its costs of production, and better utilizing Vietnam's available supplies of pig food, including self produced food and locally available food.

### Investment implication

- The government should invest in research and development, and extension services to improve the efficiency of pig producers of all sizes, especially households, because they are still the major pork suppliers.

## Notes

1. These more than doubled in the period 1996-2006. See Tisdell CA. 2009. Trends in Vietnam's pork supply and structural features of its pig sector. *The Open Area Studies Journal* 2: 52-64.
2. This is detailed in the reference given in Note 1.
3. Lapar L, Toan NN, Que NN, Jabbar M, Tisdell CA and Staal S. 2009. *Market outlet choices in the context of changing demand for fresh meat: Implications for smallholder inclusion in pork supply chain in Vietnam*. Paper presented at the 27th triennial conference of the International Association of Agricultural Economists, Beijing, China, 16-22 August, 2009.
4. Tisdell C, Lapar ML, Staal S and Que NN. 2010. Natural protection from international competition in the livestock

industry: Analysis, examples and Vietnam's pork market as a case. In: Lee TH (ed), *Agricultural economics: New research*. Nova Science Publishers, New York. pp. 155-170.

5. Ministry of Agriculture and Rural Development, Department of Livestock Production. 2010. *Livestock Development Strategy to 2020* (Revised). Publishing House for Science and Technology, Hanoi.
6. Lapar L and Toan N. 2010. *Demand for pork by Vietnamese consumers: Implications for pro-poor livestock policy and development agenda in Vietnam*. Improving the Competitiveness of Pig Producers in Vietnam Project Brief No. 1. ILRI, Nairobi, Kenya.
7. General Statistical Office of Vietnam. 2009. *Statistical Yearbook of Vietnam, 2008*. Statistical Publishing House, Hanoi. p. 289.
8. The reasons why this is so are outlined in Tisdell CA. 2010. The survival of small-scale agriculture producers in Asia, particularly Vietnam: General issues illustrated by Vietnam's agricultural sectors especially its pig production. In: Salazar A and Riva I. (eds), *Sustainable agriculture: Technology, planning and management*. Nova Science Publishers, New York.
9. See reference in Note 1.
10. See reference in Note 8 and Tisdell CA. Economic growth and transition in Vietnam and China and its consequences for their agricultural sectors: Policy and agricultural adjustment issues. *Regional Development Studies*, (In press).
11. Lapar L and Staal S. 2010. *Competitiveness of smallholder pig producers in Vietnam*. Improving the Competitiveness of Pig Producers in Vietnam Project Brief No. 5. ILRI, Nairobi, Kenya.
12. The reasons are outlined in the references mentioned in Notes 8 and 10.
13. Also of relevance is the conclusion in Minot N. 2010. *Future scenarios for pig sector development in Vietnam: Results from a policy simulation model*. Improving the Competitiveness of Pig Producers in Vietnam Project Brief No. 6. ILRI, Nairobi, Kenya that: "The modern pig sector is likely to remain small over the next decade and beyond".
14. The reasons for this are detailed in the reference given in Note 8.

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