A competitive market in search of public regulations

The case of Hanoi food supply in the north of Vietnam.

Franck JESUS Cirad Amis Ecopol

Summary

Using the example of food supply in Vietnam, this paper describes how a centrally planned system gave way to a successful competitive market in terms of price and supply effectiveness. It also shows that this evolution brought new problems, such as poor performance of some commodity chains in ensuring satisfying food quality, food safety and price stability. It appears that traders do not feel equipped to cope with these problems and are demanding more public intervention. The paper argues that solving these problems might take more than just more state intervention. It builds on recent and on-going field studies on marketing problems in the Red River Delta undertaken a collaboration project between the Centre International de Recherche en Agronomie pour le Développement (CIRAD), the Vietnam Agricultural Science Institute (VASI) and the Regional Co-ordination Centre for Research and Development of Coarse Grains, Pulses, Roots and Tuber Crops in the Humid Tropics of Asia and the Pacific (CGPRT Centre).

When facing failures of state intervention, analysts often propose to deregulate and let the market lead. When facing market failures, they will propose more state intervention (Ostrom, E. 1997). As for many sectors and activities, cities food supply systems are strongly affected by market liberalization programs and reforms. Economists often consider these reforms as efficient solutions especially when strong state intervention previously lead to deficient supply systems (as in the centrally planned economic systems of former communist countries). Competition among traders would lead to lower trade margins, better supply networks, cost effective distribution, etc. A free market would mean better fed urban dwellers. However, it seems that the withdrawal of state intervention in food supply systems generates new difficulties: the development of roads, market places, licensing, planning regulations, dispute procedures and credit facilities does not always follow the development of private traders' activities (Onumah, G.E. and Hubbard, M. 1999). Public intervention is then often suggested to produce an environment facilitating market development (Klitgaard, R.E. 1991; Onumah, G.E. and Hubbard, M. 1999). The State, as an institution with formal procedures to define fixed rules, is presented as complementary to the market, an institution with selfdetermining rules. But elements calling for state intervention, such as the preservation of satisfactory food safety and food quality standards or the resolution of transaction conflicts may not depend exclusively on the State and the market. How these elements are actually dealt with also depends on existing formal and informal interaction rules at different levels. These rules are not included in economic relations or official legislation. To apprehend those other forms of institutions "political economists need a richer set of policy formulation than just 'the' Market and 'the' State" (Ostrom, E. 1997, page 2). The example of food supply in Vietnam gives a particular insight on these issues. The evolution of the Vietnamese economy over the last two decades saw a centrally planned system give way to a competitive market. This path of change went quite successfully but also brought new problems. It seems that solving these problems will take more than just new State regulations. This paper builds on recent and on-going field studies on marketing problems in the Red River Delta conducted in collaboration by CIRAD1, the VASI2 and the CGPRT Centre3.

Fifteen years ago, Vietnam's food supply and distribution was mainly ruled by the government (Fforde, A. and De Vylder, S. 1996; Jésus, F. and Dao Thê, A. 1998; Le Goulven, K. 1996; Pingali, P.L. and Xuan, V.T. 1992). Agricultural production was organized in a collective way by co-operatives of producers. Marketing and distribution was in the hands of state-owned companies (state food company, state slaughterhouse, etc.). At that time, food deficiency was an important problem. Many regions suffered from lack of rice, and other

¹ Centre International de Recherche en Agronomie pour le Développement

Vietnam Agricultural Science Institute

³ Regional Co-ordination Centre for Research and Development of Coarse Grains, Pulses, Roots and Tuber Crops in the Humid Tropics of Asia and the Pacific

foodstuffs (meat, vegetables, fruits) were difficult to find through the state-ruled retailing system. At the same time, an informal economy had developed in response to the failure of the centralized state system. In rural areas, cultivated plots left to farmers' individual management, along with other non-collective activities, produced more than collective ones (Jésus, F. and Dao Thê, A. 1998). They allowed farmers to feed themselves. In urban areas, the food supply still remained dependant on rural areas. The rationed state food supply system⁴ led to an important development of an informal parallel market, hiding from the public authorities (Fforde, A. and De Vylder, S. 1996). Urban dwellers even developed a peculiar agricultural production system, with pigs and chicken raised directly in the houses and flats.

Today, Vietnam is a major exporter of agricultural products (rice, rubber, coffee, etc). What happened, in between, is that the state withdrew most of its intervention in the economy. Farmers were allocated land to manage as they wished, with cooperatives trying to survive through the provision of agricultural services. Trade, processing, transportation and retailing were left to private agents. The main state intervention in trade remained on food security schemes through rice-export quotas and a rice floor price system. Contrary to what happened in Eastern Europe, the rapid liberalization of the economy went quite efficiently and led to a fast growth of production (Trân Thi, A.D. 1996). In fact, when the liberalization reforms started, the informal economy was already well developed and ready to develop further.

Today, production, distribution and retailing are essentially managed by private traders, with the exception of exportation and importation where the state still plays a major role. Private agents are mostly individuals using family labor with no or few hired workers (Ronnas, P. 1992). Many came from the former state system (Le Goulven, K. 1996), but more and more, at local levels, come from the agricultural sector where limited land resources and population growth push farmers to seek opportunities outside agriculture (Jésus, F. and Dao Thê, A. 1998). There is fierce competition among these traders, but also an obvious trend of capital accumulation⁵, and a tendency to trade further and further away with time, bridging the northern and southern extremities of the country across 2000 km. Transactions are made on an individual basis without formal contract, and credit is mostly informal as well. This system successfully supplies sufficient food for the urban market and even manages to foster exportation.

Looking at such rapid achievements, one could easily conclude that private investment is sufficient and that the state should back away from the economy even further. And there would be quite good reasons advocating such a position. There has not been any problem of food supply for the urban market since the reform process began. Moreover, the private distribution system provides food to urban consumers with a very low farm-retail price difference. In Hanoi, rice is sold to consumers at a price only 15 percent higher than at the farm gate level (see Table 1), while the farm-wholesale difference reaches 40 percent in Indonesia (Erwidodo and Hadi, P.U. 1999) and the farm-retail difference reaches more than 1 000 percent in the United States (USDA, 1998). For pork the farm-retail price difference is 22 percent for Hanoi consumers, while it reaches 150-300 percent in the United States (USDA data 1990-1999).

Table 1 - Price levels along the rice and pig commodity chains

	Rice trade		Pig trade		
	In US\$ per T. of paddy equivalent	As percentage of farm gate price	In US\$ per quintal of live weight equivalent	As percentage of farm gate price	
Farm gate price	152	100%	61	100%	
Wholesale-Farm gate trade margin	11	7%	5	8%	
Retail-Wholesale trade margin	13	8%	12	12%	
Retail price in Hanoi	175	115%	73	120%	

Source: surveys conducted in the Red River Delta by the author and a team of Vietnamese scientists from VASI lead by Le Thi Châu Dung (1998-1999)

However, interviews of traders give, today, a different view of the situation. They show that, in the rice or the pig commodity chain of northern Viet Nam, traders face problems concerning delayed payments, price instability, product quality and access to international markets (Table 2)⁶. And, unexpectedly, they consider

⁴ Food distribution was organized officially through a state-controlled retailing system in which state workers could get a specified ration of food in exchange for coupons distributed by the state according to the family size.

⁵ The bigger inter-provincial traders have been in the activity for 10 years or more.

⁶ Among all problems expressed by traders during interviews only the most common are presented in Table 2 and only the first three are analysed in detail.

that state intervention is the only way to solve these problems (as indicated by group discussions and ongoing institutional surveys).

Table 2 - Traders' problems in the rice and pig commodity chains

Main problems	Proportion of traders facing problems							
	Rice commodity chain			Pig commodity chain				
	All traders?	Wholesalers	Urban retailers	All traders8	Wholesalers	Retailers		
Delayed payments	30%	28%	40%	39%	40%	46%		
Price instability	30%	44%	60%	28%	36%	29%		
Insufficient quality	23%	39%	40%	43%	40%	45%		
Lack of capital	23%	33%	0%	17%	30%	19%		
Fierce competition	17%	28%	20%	17%	10%	21%		

Source: surveys conducted in the Red River Delta by the author and a team of Vietnamese scientists from VASI lead by Le Thi Châu Dung (1998-1999)

Risk on transaction and price instability

Traders complaining about delayed payments and price instability (around 40 percent of rice and pig wholesalers interviewed complain about price instability while 30-40 percent of all traders complain about delayed payments) mainly refer to the high risk level of agricultural trade business. Since the beginning of the reform process, the number of traders has been increasing strongly and competition is fierce among them. This situation led to decreases in trade margins during the last decade (IFPRI, 1996) and a form of dependency of sellers upon buyers. Most traders sell through a diverted payment system in which the buyer gives the final payment for a transaction when the next transaction comes, only to divert the same amount from the payment of the new transaction. Such credit binding, combined with very low trade margins⁹ and the absence of formal contracts make price variations very hazardous and can lead to total bankruptcy when buyers refuse to reimburse. Price variations also influence traders through their effects on farmers' production decisions. This is especially true for animal production such as pigs, where a combined decrease of pig price and increase of feeding price (mainly rice, see Figure 1) can strongly reduce net benefit (as in the 1998-2000 period) leading to production decrease in both quantity and quality¹⁰.

Through the rice floor price system, the state has a stabilizing effect but the system does not reduce price hikes and only operates for rice. Traders, by linking markets further and further away also play a role in stabilizing prices. But nothing is currently done to decrease the risks on transaction costs.

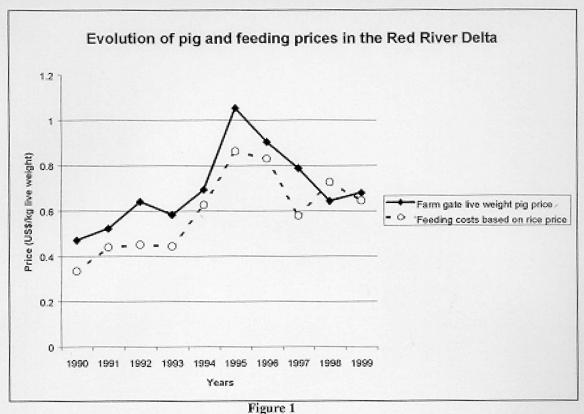
Traders generally await a form of state intervention aimed at market stabilization through floor price systems and export development.

⁷ Includes: collectors, local wholesalers, inter-provincial wholesalers, processors, local retailers, urban retailers

⁸ Includes: collectors, slaughters, wholesalers, processors, retailers

⁹ Recent studies on vegetable marketing channels in the Red River Delta also show low trade margins at the regional level and low net trade margins with high gross trade margin (due to high transportation costs) for inter-regional transactions (Dao Thê, T. et al. 2000).

Farmer surveys during the period 1998-1999 showed that most pig raisers had reduced the number of pigs fed and had extended the feeding period by reducing daily pig meals. The later action allowed them to wait longer for better prices but also had a negative impact on pig quality (fatter pigs).



Source: original data from the Programme Fleuve Rouge project (Groupe de Recherche et d'Echanges Technologiques [GRET] and VASI) recomputed by the author.

Products quality

When traders complain about quality they mainly refer to the difficulties in meeting the increasing demand of urban consumers for better food and the international standards for exportation. Although no transparent quality evaluation system exists, quality is more or less paid for at the retailing level, especially in urban markets. But many problems remain in the management of quality within the commodity chain.

For rice, 40 percent of wholesalers and retailers interviewed complained about low rice grain quality, about difficulties in proper grain grading. These difficulties originate from high heterogeneity of grain sources and low attention paid to grading at farmers' and collectors' levels. Wholesalers buy rice from many collectors, who, in turn, buy paddy from many different farmers, each selling small quantities. On average, farmers sell only one-third of their rice production (the rest is used for animal feeding and family consumption). Therefore, they tend to maximize the quantity produced (for animal feeding and self-sufficiency) and little attention is paid to producing good grain quality. Moreover, at farmer and collector levels, there is no clear price difference for grain quality and, thus, little incentive to improve it or to grade grain.

For pigs, traders complain about pigs being too fat, ill conformed or sold when sick (40 percent of all pig traders complain about pig quality). At the producer level, as for rice, selling is not the main objective of pig raising. Most farmers raise pigs mainly for manure and as a saving scheme; when these two elements are not taken in account, pig raising does not return any benefit. Only 15 to 25 percent of all farmers produce more pigs than would be necessary for just manuring crops and manage to get some profit out of the activity. Therefore, taking advantage of available feed and producing manure often supercedes improving pig quality. Moreover, price premium for leaner pigs or for better conformed animals are neither clear nor systematic. Even at the consumer level, slicing out thick fat is the main way used to meet the lean meat demand, without taking account of the real fat content of the meat. As for food safety, another aspect of pig meat quality, the current behavior of producers, traders, consumers and veterinary control services make it difficult to ensure healthy meat to urban markets. Sick pigs are still sold on the market without the consumers knowledge. Lack of means limit veterinary controls, and consumers do not understand or trust (and therefore can not use) the food safety control marks when they appear.

Altogether, state intervention for quality improvement is very low. Still, in a few villages over the whole Red River Delta, initiatives on pig quality from private actors can be found. There, all villagers are producing leaner pigs and traders are buying pigs with prices 10-15% higher than in other places. For rice, in rare cases,

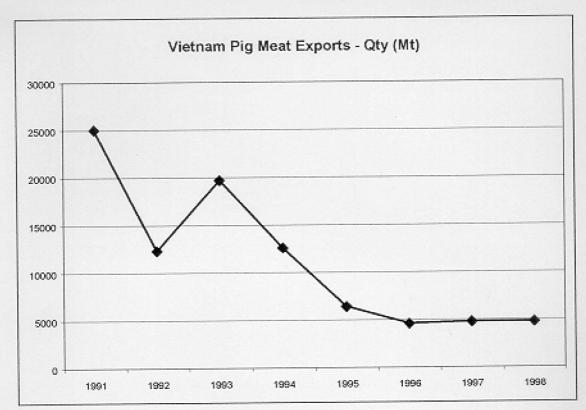


Figure 2

Source: FAOSTAT.

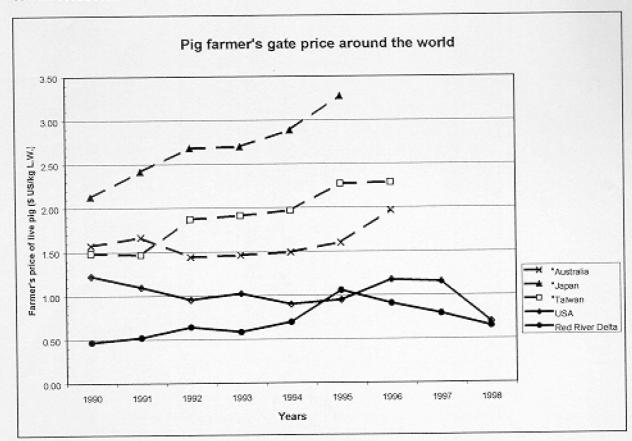


Figure 3

Source: USDA data, original data from the Programme Fleuve Rouge project (Groupe de Recherche et d'Echanges Technologiques [GRET] and VASI) recomputed by the author and surveys conducted in the Red River Delta by the author and a team of Vietnamese scientists from VASI lead by Le Thi Châu Dung (1998-1999).

wholesalers can be found counseling farmers on cultivation and post-harvest techniques and paying them more for better grain quality.

These initiatives all rely on a modification of both traders and farmers' behavior supporting the opinion that the quality output of a whole commodity chain doesn't depend on the actions of only one type of actor. In fact, producers, traders, but also public services and consumers are all affecting, by their actions and interactions, the global quality level and, therefore, all have a role to play in the improvement of quality levels.

However, these initiatives have restrained scope and scale: they are geographically very limited and do not deal with product safety. They also face other strong limitations. Quality evaluation is not achieved through a clear, transparent process, but depends heavily on eyesight, experience, and confidence building. For traders as well as for consumers the final evaluation comes after the deal is scaled. In situations like this, where quality is not completely identified before the transaction, and where information asymmetry is important (Le Goulven, K. 1996), problems of adverse selection and moral hazard occur (Stiglitz, J.E. 1987). Since moral hazard can lead to opportunistic free-riding behavior and adverse selection can make a market of specific goods disappear¹¹ (Raynaud, E. and Sauvée, L. 2000), it may not be possible for existing initiatives to endure or to spread.

To ease quality problems, traders consider that state intervention is necessary. They believe that the government should aim at developing exportation contracts with clear quality standards and controls which would, according to them, pull up the internal market quality level, increase prices and, consequently, give more incentive for producers to invest in quality.

Access to international markets

For both problems of price instability and product quality, access to the international market is considered by traders as a desirable solution. Traders also consider that the state has an essential role to play to link them to outside markets. Currently, price and quality levels hamper export opportunities. Rice is exported in large quantity but exported grains are of low quality, and paid at low prices (between US\$215 and 270 per ton of white rice, while one ton of Thai white milled long grain is sold US\$70-120 higher – Source: USDA and Vietnam Agricultural Ministry data). Moreover, exportations mainly come from the south of Vietnam and current domestic price levels in the north of Vietnam would make it difficult to export Red River Delta rice. Pig exportations have strongly decreased since 1993-1995 (Figure 2). Since pig prices in Vietnam are lower than in other countries, including the United States of America (Figure 3), this lack of competitiveness should not be blamed on high price but on low quality levels. Formerly, pork was sold to eastern Europe countries and Russia captive markets. These markets have thinned dramatically and are now open to western Europe countries. Other international market opportunities exist but demand high quality standards that Vietnamese pork production can not currently meet 12 (Vu Le Trong, B. 1995).

Currently, exportations are mainly managed by state-owned companies although private investors play an increasing role in rice exportation in the south of Victnam.

Traders consider the state is the only actor able to "find" international markets for Vietnamese products and that it should set and control quality as well as production standards for exportation.

¹¹ In our case, it would concern the market of a specific quality for pig or rice.

¹² A similar evolution occured for vegetables production of the Red River Delta, with a decrease of exportation opportunities to the former Soviet Union and eastern Europe countries and a development of new marketing channels within Vietnam (Dao Thê, T, et al. 2000)

Conclusion

The Vietnam case shows that a free market and private investment can play a major role in making supply and distribution sufficient and dynamic and in achieving low trade margins. A closer look at the situation of traders of two major agricultural products, rice and pork, reveals that they consider the state to have an important role to play in regulations aimed at facilitating access to export, stabilizing price and ensuring quality standards for consumers. The current actions of private economic agents on one side and of the state on the other side do not appear to succeed in achieving satisfying results on these three points. Private traders' opinions seem to acknowledge difficulties for market institutions alone to cope with such tasks. They are looking for more state intervention. In a country where public intervention has mainly been ruled by the state, such a position may not exactly mean more national government intervention, but may well be understood as a demand for more public, common or collective regulations. The state may not have sufficient means to cover such demands, especially in a poor country like Viet Nam and after the recent Asian economic crisis, which reduced the influx of foreign capital. Moreover, solving the current problems may not depend on the sole intervention of public agencies. Quality and safety of food products, risk on transactions, are the result of behaviors and interactions of many different stakeholders. Among the existing stakeholders, it seems that none has the ability, alone, to control these results completely along a whole commodity chain. In such situation, establishing clear rules of interaction is often necessary. But when individual behaviors are not compliant, rules may well be twisted by free-riders and become inefficient. Rules should be accompanied by incentives, control means and management tools (Brinkerhorff, D.W. 1996) and they should be crafted by the stakeholders themselves. Current dynamics in Vietnam seem to imply that new institutional arrangements are required and that it is the coordination of producers, private traders, local authorities and national or regional public agencies or services which is at stake to fill the "institutional vacuum" (Dao Thê, T. 1998) left by fifteen years of liberalization. Beside the technical innovations, which are usually well cared for, the challenge for Vietnamese cities food supply may well be the development of these new institutional arrangements involving government agencies, private traders, farmers and consumers. Considering the current situation, the role of the state and of local authorities in such a process probably lies in facilitating and promoting the emergence and the development of these new arrangements among the scattered individual farmers and traders (Dao Thê, T. 2000). Achieving this is a complex task for which methods have already been developed (Bourgeois, R. and Herrera, D. 1998; Bourgeois, R. and Jésus, F. 2001; Ollagnon, H. 1987).

Bibliography:

- Bourgeois, R. & D. Herrera 1998. Filières et dialogue pour l'action La méthode CADIAC. Montpellier, France, CIRAD, 176 pp.
- Bourgeois, R. & F. Jésus 2001. Reconciling actors preferences in policy definition Concepts, methods and tools for a new management of public decisions, To be published in 2001 pp.
- Brinkerhorff, D.W. 1996. "Coordination issues in policy implementation networks: an illustration from Madagascar's environmental action plan." World Development 29(9): 1497-1510.
- Dao Thê, T. 1998. Vietnam, Le vide institutionnel. Courrier de la planète. Sept-Oct: 28-29.
- Dao Thê, T. 2000. Vê chiến luoc phat triển kinh tê va nông nghiệp ("On the develpment strategies for economy and agriculture"). Phat triển nông thôn. Hanoi, Vietnam: 5-8.
- Dao Thê, T., T. Lê Duc, T. Bui Thi, H. Trân Ngọc & D. Lê Thi Châu 2000. Study on commodity chain of vegetables in the Red River Delta. Hanoi, Victnam, Vietnam Agricultural Science Institute. 13 pp.
- Erwidodo & P.U. Hadi 1999. Effects of trade liberalization on agriculture in Indonesia: Commodity aspects. Bogor, Indonesia, CGPRT Centre. 126 pp.
- Fforde, A. & S. De Vylder 1996. From plan to market, the economic transition in Vietnam. Boulder, USA, Westview Press. 360 pp.
- IFPRI, 1996. Rice Market monitoring and policy options study [in Vietnam]. Washington DC, USA, IFPRI: 535.
- Jésus, F. & A. Dao Thê 1998. Les réformes au Vietnam depuis 1979 et leurs effets sur les ménages agricoles. Nogent sur Marne, France, CIRAD-URPA. 82 pp.
- Klitgaard, R.E. 1991. Adjusting to Reality: Beyond "State Versus Market" in Economic Development. San Fransisco, USA, International Center for Economic Growth. 303 pp.

- Le Goulven, K. 1996. Les formes de coordination de la filière de viande porcine dans le delta du Fleuve Rouge, Vietnam du nord. Montpellier, France, Université de Montpellier I ENSAM CNEARC: 110 pp.
- Ollagnon, H. 1987. "Une nécessaire rencontre des approches théoriques et pragmatiques de la gestion de la nature: l'audit patrimonial de type système-acteurs." Cahier du GERMES(12).
- Onumah, G.E. & M. Hubbard 1999. Urban Food Supply and Distribution: Policies addressing Urban Poverty. Rome, Italy, FAO. 41 pp.
- Ostrom, E. 1997. "The Comparative Study of Public Economics." Acceptance paper for the Frank E. Seidman Distinguished Award in Political Economy.
- Pingali, P.L. & V.T. Xuan 1992. "Vietnam: decollectivization and rice productivity growth." Economic development and cultural change.: 697-718.
- Raynaud, E. & L. Sauvée 2000. "Signes collectifs de qualité et structures de gouvernance." Economie rurale (258): 101-112.
- Ronnas, P. 1992. Employment generation through private entreneurship in Vietnam. Geneva, Switzerland, International Labour Office. 164 pp.
- Stiglitz, J.E. 1987. "The cause and consequences of the dependence of quality on price." Journal of economic literature 25: 1-48.
- Trân Thi, A.D. (1996). Comparaison des politiques de stabilisation au Vietnam et dans les pays de l'Est. Journées scientifiques du Réseau Analyse Economique et Développement de l'AUPELF-UREF, Hanoi, Viet Nam, AUPELF-UREF.
- USDA, 1998. Agriculture Fact Book 1998. Washington DC, USA, USDA. 277 pp.
- Vu Le Trong, B. (1995). Le système de production porcine du delta du Fleuve Rouge. Les nouveaux paysans du Delta du Fleuve Rouge: p. 125-142. Hanoi, Vietnam Agricultural Science Institute.