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Local Trajectories in the Vietnamese Transition to Market Economy: Alliances Between Firms, Farmers and Government Officials in the dairy industry

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Abstract

Since the end of 1980s, the liberalization of the Vietnamese economy has led to the rapid emergence of a private dairy sector. This fast development can be understood as a major institutional change from centrally planned and collectivist economy to market economy. We analyze this institutional change using the political-cultural approach (Fligstein, 2001). We collected data and interviewed stakeholders in the Ba Vi District (North of Vietnam), where dairy has become an important economic activity, as well as at national level. Our approach considers the historical transformation that happened in the last 30 years. We analyze 4 types of rules (or social structures) that shape the current architecture of markets: property rights, governance structure, rules of exchange and conception of control. We show how those rules result from conflicts or alliances between farmers, firms and government officials in the attempt to stabilize the market. We consider in particular how stakeholders response to crises on the market. In Ba Vi, we observe an original market structure where the alliance between the State, the farmers and some dairy corporation has led to the emergence of an inclusive system. However, since the Melamine Crisis in 2008, and in the context of new liberal economic policies, the IDP dairy industry has become dominant in the market. In an attempt to reduce the competition for the collection of milk in the District, a new alliance between this firm and the local Government has emerged, which appears to be less inclusive. Our results also point out that the consumers and the media are playing an increasingly important role in the formation of those institutions. Through reputation and trust mechanisms, consumers are in position of legitimating – or challenging this new capitalist market structure.

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Highlights

- We show how globalization, public policies and institutions have driven dairy development in Vietnam in the last 50 years.
- We analyze this transition referring to economic sociology and in particular to Fligstein's political-cultural approach (2001).
- We explain how alliances between workers (farmers), and government officials (State) shape the evolution of institutional forms in the livestock industry.

Introduction

In the context of the global liberalization happening in the developing world, livestock constitutes one of the most rapid changing sectors. Understanding those changes might therefore bring interesting elements to analyze the ambiguous effects of globalization on local socio-economic development. The dairy sector is in particular very relevant for comparing dominant and alternative models and to assess the strengths and weaknesses of development policies for developed, developing, and transition countries. The ongoing changes affecting livestock have had a strong impact on rural communities, because of the importance of animal production in income generation, livelihoods, human health, natural resource development, social organization and cultural identities (Alary et al., 2011; Duteurtre and Faye, 2009). Thus, there is a need to better understand this huge transformation and the way to manage it.

In response to a very high increase of the demand for animal products, livestock production systems and marketing chains in developing countries appear to be more and more intensified and industrialized. The concept of "livestock revolution" has been proposed to underline this important transformation occurring at various speeds in Asia, Latin America, and Africa (Delgado et al. 1999). The concept of "revolution" is probably not the best one for describing such a gradual, complex and heterogeneous transformation. And market changes are obviously not the only factor impacting the transition of livestock systems in developing countries (Sumberg and Thompson, 2013). However, we shall recognize that "the sustained rise in demand for food of animal origin, driven by growing populations, increasing consumer affluence, and increasing urbanization, is underpinned by structural changes along the whole animal food supply chain" (Steinfeld et al., 2006).

Several authors have focused on understanding "drivers" of changes of this "livestock revolution" and "consequences" on economic, environmental and social dimensions of this transition. In their extensive literature review, Steinfeld et al. (2010) identify 4 groups of "drivers" of changes impacting the livestock sector: (i) market changes (trends in consumption, changes in trade patterns, retail, supply chains, food production systems, quality standards); (ii) use of natural resources (land, water, fossil fuels, climate, climate change); (iii) availability of technologies (genetics, nutrition, health control, etc.); and (iv) policy and institutions (including the regulatory framework and incentives). This review underlines the weak development of the literature dealing with the latter, i.e. the need to better understanding the role of policy framework and institutions in managing the livestock revolution in the developing world.

The present communication aims at proposing a framework for analyzing those institutional factors affecting the livestock sector transformation. Or main hypothesis is that socio-political factors explaining this structural transformation are related to the way market institutions are embodied in social, cultural and political relationships, resulting in specific historical trajectories (North, 1990). Beyond the role of demand stressed by many authors to explain this structural change, we want to assess the importance of drivers related to power mechanisms that involve State, farmers and large corporations. Our attempt is therefore to review the concept of livestock revolution through a better understanding of the way global capitalism affects the livestock sector and the whole rural society (Dirlik et al., 2012). Focus is made on the dairy sector in Vietnam, which has been changing a lot in the last 25 years (Duteurtre et al., 2015; Nguyen Mai Huong et al., 2016).

The paper is organized in 3 parts. The first part explains the conceptual framework and the method that is used in our analysis. The second part presents the main results. It gives a brief presentation of the historical transformation of the dairy sector in the Ba Vi District, focusing on the evolution of the role of the local stakeholders in the regulation of the sector. It also presents the main institutional processes observed at the national scale: the emergence of a stabilized market for mass dairy productions; and the progressive concentration of productive capital in large corporations. The third part proposes a brief discussion regarding the dynamics of capitalism in the livestock sector in Vietnam.

1. Methodology

1.1 Case-study: the Vietnamese dairy industry facing structural transition

Vietnam remained a mostly "non-milk" region until the end of the XIXth century. It is only when the French and other foreigners started to set up in Vietnam under the colonial regime that the consumption of milk and milk products emerged. During the collectivist period, dairying was mainly concentrated in large-scale State-farms (Duteurtre et al., 2015).

Since the end of 1980s, the liberalization of the Vietnamese economy has led to the rapid emergence of a private dairy sector. The "Đổi Mới" (or reform) period consisted in redistribution of land to farmers, restoring the rural household as the main unit of production, allowing and developing the private sector, privatizing state owned enterprises, and opening national market to foreign investment. This fast development can be understood as a major institutional change from a centrally planned (and collectivist) economy to a so called "socialist-oriented market economy" (Duteurtre et al., 2015). This socio-economic transition

(De Terssac et al., 2014) has led to a complete reorganization of the dairy sector. After a decade of strong development of the small-scale family dairy production - that can be called the "peasant" dairy production-, the new market economy has led to a progressive emergence of integrated livestock corporations and large-scale farms¹ (Nguyen Mai Huong, 2016).

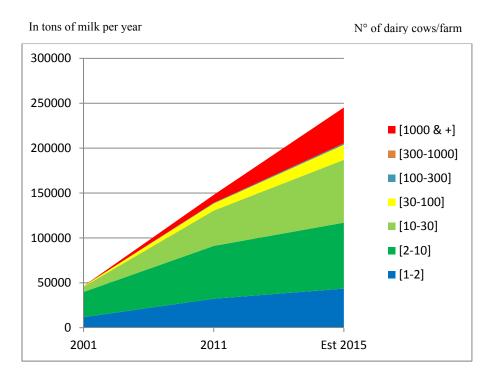


Figure 1: Contribution of farms of different size in the milk production in Vietnam

(Source: 2001 and 2011 Agro-Census, 2015 est. by authors)

Our objective is to understand how this liberalization process of the Vietnamese economy has fostered the construction of a dairy market. In particular, we want to assess how the new market economy combined with the new national livestock policy have led to a progressive emergence of integrated livestock corporations, large-scale farms, and dairy processing firms strongly linked with international dairy market.

1.2 Conceptual framework: The political-cultural approach of markets

We analyze this transition referring to economic sociology and in particular to the political-cultural approach proposed by Fligstein (1996 and 2001). This approach provides "generic analytic tools to understand what a particular set of market arrangements implies about the

¹ Between 2001 and 2011, the number of dairy cows increased from 35,000 to 130,000, mainly raised in household dairy farms. In the same time, the national milk production increased from 70,000 to 329,000 tones. But in 2015, milk produced by mega farms of more than 1000 cows accounted to around 25% of the production (Nguyen Mai Huong et al., 2016).

power structure of a society." (Fligstein, 2001: p. 28). The main contribution of this approach is to help understanding how rules produced by firms and governments produce stability in market economies.

In this institutional perspective, markets are considered as "fields", i.e. social arenas characterized by "structured exchange". Structured exchange "implies that actors expect repeated exchanges for their products and that, therefore, they need rules and social structures to guide and organize exchange" (Fligstein 2001: p. 32). In those social arenas, the production of rules is viewed as a political-cultural process: "actors try to produce a "local" stable world where the dominant actors produce meanings that allow them to reproduce their advantage" (Fligstein 2001). Hence, the emergence of market rules is viewed in an historical perspective that involves 3 connected features (i) cognitive frames; (ii) routines or practices; (iii) social relations. Those 3 elements shape the social structures; they resolve crises and stabilize the markets.

In order to understand which institutional processes are involved in producing structured exchange and social organization of markets, Fligstein proposes to consider four "types of rules", (i) property rights; (ii) governance structure; (iii) rules of exchange and (iv) conception of control. Those four kinds of rules are also called "social structures" or "institutional arrangements" (Fligstein, 2001).

Property rights "are rules that define who has claims on the profits of firms (...). This general statement leaves open the issues of the different legal forms of property rights (e.g., corporations vs. partnerships); the relationship between shareholders and employees, local communities, suppliers, and customers; and the role of the state in directing investment, owning firms, and preventing owners from harming workers" (Fligstein, 2001: 33). Property rights might also refer to "intangible assets" such as collective brand, reputation or production quotas that play an important role in the competition on dairy markets (Dervillé and Allaire, 2014).

Governance structures "refer to the general rules in a society that define relations of competition and cooperation and define how firms should be organized. These rules define the legal and illegal form of controlling competition. The take two forms: (1) laws and (2) informal institutional practices" (Fligstein, 2001: 34).

Rules of exchange define "who can transact with whom and the conditions under which transactions are carried out. Rules must be established regarding weights, common

standards, shipping, billing, insurance, the exchange of money (i.e. banks), and the enforcement of contracts. Rules of exchange regulate health and safety standards of products and the standardization of products more generally" (Fligstein, 2001: 35.

Conceptions of control are collective conceptions that reflect the hierarchy of values on a given market. They reflect "market-specific agreements between actors in firms on principles of internal organization (i.e., forms of hierarchy), tactics for competition or cooperation (i.e., strategies), and the hierarchy or status ordering of firms in a given market" (Fligstein, 2001: 36). A conception of control is a form of "local knowledge", and might be understand as a "convention" (Dervillé and Allaire, 2014). Conceptions of control are historical and cultural products.

The identification of those 4 types of rules and of the way they are operating in a given industry provides a tool to understanding the institutional dynamics of the markets, i.e., how alliances and dominations between workers (farmers), capitalists (firms) and government officials (State) impact the evolution of social structures of a given market. The role of institutional arrangements in resolving market instability is at the core of Fligstein's vision of the "formation" of market institutions. "State actors are constantly attending to one market crisis or another. This is because markets are always organized and destabilized, and firms and workers are lobbying for State intervention" (Fligstein, 2001:41).

1.3 Case-study and data collection

Our analysis is based on a collaborative research project² conducted from 2013 to 2016. A research partnership with local institutions and stakeholders has been set up in order to develop fieldwork capacities in collaboration with local research and development institutions.

The study is built on empirical observations conducted from 2013 to 2015 in the Bavi district located in the north of Vietnam. This district was chosen because of its strong involvement in dairy production and marketing. Ba Vi is the largest milk shed in the Red River Delta. In 2014, the district reached a total of 7,600 heads for a total production of 20,000 tons per year which represents 55,000 liters per day. This dynamism relies on small scale dairy producers, but also large private corporations and local government authorities, both very proactive in supporting rural development (Culas et Pannier, 2015; Duteurtre et al., 2015).

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² Namely the « Revalter » project, see <u>www.futurelivestock.net</u>

The research team comprised French and Vietnamese economists, anthropologists, geographers, agronomists and animal scientist. We combined observation of practices and formal interviews with officials, villagers and director or workers of different processors (industrial, semi-industrial, and cottage-type) and dairy firms. We were able, as well, to consult various written sources such as collectors' registers, the accounts of advances made to breeders, personal archives, etc. We had, too, the opportunity to converse more informally during lunch and dinners with the villagers. These field data were completed by an extensive literature review on dairy development in the region.

2. Results: multi-scale institutional arrangements and the "formation" of a dairy market in Vietnam

In this section, we show how institutional change is shaping the livestock revolution in the Vietnamese dairy sector. We propose first to describe the arrangements that shape the "formation" of dairy markets in the Ba Vi district during the Doi Moi period. Second, we show the institutional dimension of the concentration of productive capital at the national level since government liberal reforms in 2008. Third, we discuss the emergence of a "stabilized" market for mass consumption dairy products in the country.

2.1 Changes in property rights during the Đổi Mới: the alliance between state and peasants

The history of milk production and marketing in Bavi has been heavily influenced by the shifts in the property right regimes that happened since the beginning of the XXth century.

2.1.1 The emergence of the collective livestock agriculture in the 1950s

The first dairy cows were introduced in Ba Vi region in the 1920s by Marius Borel, a French colonial farmer. Milk production on the Borel farm was originally a by-product of the production of manure for his large coffee plantation located in My-Khê down the slopes of the Ba Vi Mount. But due to his interest in dairy cows, milk production and cottage processing became a very dynamic business focused on provisioning the capital city with locally produced dairy products. The colonial concession flourished and Borel was able to set-up another dairy business in the southern part of the country (Borel, 1963)

After the collapse of the French positions in Vietnam in 1954, former private concessions were nationalized and the old Borel dairy farm became a Military farms, and later on, a State Farm. The ownership of land and animals was taken over by the government, because the

property rights regime was in favor of State production and collective agriculture. From 1960 and during the collectivist period, milk production in Ba Vi was concentrated in a large State dairy Farm that remained on the former Borel concession, raising around 1,000 cows during the 1970s and 1980s (Duteurtre et al., 2015). In this context, workers got monthly salaries, but they were not recognized as peasants. In the cooperatives, famers did not get any property rights: because of the organization of the cooperative brigades, workers were not formally allowed to decide on their time allocation (Dao The Tuan). However, the dairy production was not concerned with cooperative production.

During the 1980s, the political reform progressively led to the transfer of part of the production capital to the individual farmers. This property right process can be understood in line with the shift of the governance structure during the transition from collective to market economy.

2.1.2 The progressive emergence of sharecropping arrangements in former State-Farm

In 1981, the Directive 100 formally recognized the right of peasants to decide on their own work. The cooperatives and State farms were allowed to sign contracts with individual farmers to use the collective capital (land, animals) for their own profit through tenant contracts or share-cropping agreements. In 1988, the Resolution 10 recognized family agriculture as the main model for agriculture production. It abolished the obligation to deliver agricultural products to the State marketing network, and therefore allowed peasants to use their own capital for their own profit. But the land use rights still remained the property of the cooperatives and the State Farms (Dao the Tuan, 2001).

Following this change in the governance structure, the Ba Vì State farm started to develop share-cropping contract with households in 1986. In 1989, the Dairy State Farm become the Ba Vi cow and forage Research Center and started to allocate land and cows to individual families through sharecropping contracts. A hundred families embarked on dairying on the land controlled by the Center (around 1000 ha). They were mostly former workers of the State Farm, but also migrants from the Red River Delta and local rural families. During the 2000s, sharecropping contracts between the Center and peasants were signed for a long period. It explicitly recognized the model of individual families devoted to intensive forage cropping and zero-grazing breeding system for dairy cows. The contract also included a support of the Ba Vi research center in various services securing the business: feed, milk collection, vet

services. Additional services such as artificial insemination were also provided by other government services.

Households who were farming on the Research Center were allowed to buy the off-springs of the cows owned by the Center. They also started to buy heifers to develop their own business. In this system, the property rights regime supported the transmission of production capital to small-scale dairy households in a close alliance with the management of the Research Center. The State continued to play a role in market stabilization by supporting access to resource and to markets for small farmers. And the sharecropping arrangements allowed the implementation of the model of the individual household farms in this area, with a formal recognition of their right to use their working capital and their animals. But the formal land use right of the land of the former State farm remained the property of the research Center. Until 2016, dairy producers located inside the Bavi Research center remained sharecroppers.

2.1.3 The development of land use rights for farmers outside the former State Farms

The situation was rather different outside the Land of the former State farm. In 1993, the new land law officially gave the right to the peasants to control the use of land, by giving them a "Land use right certificate" (*Giáy chúng nhận quyền sớ dụng đất*), also called « Red Book » (sổ đớ). Most of agricultural land was attributed to individual households, resulting in a highly equitable land reform. The very low availability of cropping land (around ½ ha per family on avarage) led to the emergence of millions of smallholder peasants (Dao The Tuan, 2002). Formally, land rights were divided into three categories: land ownership, land management, and land use rights. According to the 1993 Land Law, "land that belongs to the entire people is managed by the State (...) The State allocates or rents land use rights to users" (National Assembly, 2003). Annual cropping land use rights were signed for 25 years, and perennial cropping land use rights for 50 years. In the following years, the local popular committees of the District and communes kept a strong role in managing access to land through progressively issuying formal certificates." (Duteurtre et al., 201)

The success of small-holder dairy production on the Research Center led to the progressive engagement of private processors and milk retailers in the vicinities of the Center. Gradually, during the 2000s, small-holder dairy production spread in the different communes of the district, especially in 3 communes that became specialized in milk production: Tan Linh, Van Hoa and Yen Bai. The majority of the dairy farms were small-scale, with less than 5 cows/farm kept in stables in 2011 (Hostiou et al., 2012). This period encompassed a

tremendous transformation in milk production with a new production model based on individual smallholder farms. These changes led to a rapid increase in the number of heads, changes in livestock breeding practices and emergence of dairy products marketing in Ba Vi (Duteurtre, 2015; Nguyen Mai Huong, 2016).

In order to provide services to dairy farmers located outside the Research Center, a Development Center for livestock in Hanoi was set up. This Center was supported at the beginning by a development project financed by the Belgium Cooperation and the Ministry of Agriculture and by national regulation (see Decision 167/2001). This development center also beneficiated from the experience of the Research Center.

Simultaneously, some private dairy processors engaged in the value chain. Their investment resulted in secured outlets and added value to the milk produced in the area. Most of them were small-scale processors. But in 2005, larger dairy companies started to invest in the collection of milk in Ba Vì (namely Nestlé, Vinamilk, Hanoi milk...). These companies supported the creation of private milk collection points with cooled milk-tanks installed in the villages. They establish hygiene controls and procedures at farm level and at collection points. This resulted in a new conception of control where family farming was the main beneficiary of development initiatives from public authorities and private entrepreneurs.

2.1.4 The model of family dairy production at the core of the conception of control

From 1993 to 2008, the production capital (land, labor and animals) remained controlled by the State and peasant farmers. This close alliance resulted in a strong engagement of public services in favor of the inclusion of peasants in the dairy market. Based on the governance structure provided by the Doi Moi reform, the conception of control recognized the need to promote economic development through the model of small-scale family agriculture (Figure 2).

Article 2. Interests

- 1. The contracting livestock farmers receive cows to conduct dairy farming in order to develop economic activities for their families
- 2. They beneficiate from support for artificial insemination, vet services, and epidemics
- 3. The receive support for infertile cows (...)
- 4. They get paid according to the difference in the weight of animals between the beginning and the end of the year (...) and for the price of milk in relation with quantity and quality (...).

Figure 2: Sharecropping contracts between farmers and the Bavi research center

Progressively, a processing and industry emerged, allowing the peasant farms to expand, and resulting a real "success story" of family milk production in Ba Vi. Between 2001 and 2011, in the three communes of Tan Linh, Van Hoa and Yen Bai, the number of dairy cows rose from 1,300 to 6,000. And the number of processing industry rose to more than 20 small-scale processing entreprises, with 3 industrial companies collecting in the area.

This development resulted in a growing competition in the milk collection. The collection system started to be become unstable, with producers switching from 1 company to another. The Nestlé factory stopped its operation in the District. This crisis came to its climax when some dairy companies collecting milk in Bavi where hit by the Melamine Crisis in October 2008. The Hanoi milk company, in particular, who was proven to have used contaminated milk from China, had to stop its operation. During more than 2 months, some farmers could not sell their milk anymore to collection centers that had been contracted with.

2.2 The constitution of a secured market for mass consumption products

At the end of 2008, the organization of the market changed radically. The market became more concentrated and less competitive. Only two companies took over the collection of the majority of the milk produced in the Ba Vi District: the International Dairy Production Enterprise (IDP) and the Bavi Milk Company. Two major elements must be considered in this transformation: the constitution of a secured market for mass consumption products; and the strategic concentration of the dairy industry. We first discuss the first element related to the emergence of a national market for dairy products.

2.2.1 The emergence of a national market for dairy products

As stated in our introduction, the emergence of a dairy market in Vietnam is quite recent. The level of consumption remained very limited until Doi Moi and was limited to the consumption of concentrated milk with coffee in the "ca phê" boutiques. Since the production of fresh milk was restricted to several State Farms, most of this consumption came from imported concentrated milk (Figure 3)

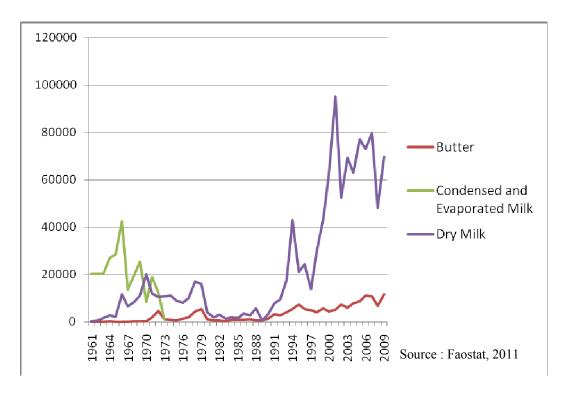


Figure 3: Imports of dairy products in Vietnam (in tons)

After Doi Moi, dairy consumption started to grow at a very high rate, resulting from urbanization, income rise, and also from a new interest of Vietnamese consumers for children's feeding with dairy products. Between 1991 and 2007, the average consumption of dairy products rose from 2,1 to 11,7 kg of milk equivalent per capita.

This emerging market created a huge demand for healthy processed products. Consequently, a rapid development of dairy processing industry arose in the 1990s and 2000s. Some national and international companies set up on this market at this time. The most important were the former national dairy processing company (Vinamilk) and the Dutch Lady (later renamed Frisian Campina). Despite the expansion of the production of local milk, most of those industries relied on processing imported powder milk. In 2008, the domestic production represented only 20% of the ingredients used in those industries.

Because of the importance of those products in the diet of young children, the State was heavily involved in defining the rules of exchanges. The prices of infant milk powder remained controlled by the Government until the beginning of the 2010s (Diaz Pedregal and Nguyen Ngoc Luan, 2010).

2.2.2 The strong impact of the Melamine Crisis (2008)

In October 2008, the Melanine crisis had a very strong impact on the institutional arrangements in the sector. Following this major crisis, many of the dairy processing

industries decided to develop their milk collection capacities in the objective to produce milk cartons labelled "100% Fresh milk". The government supported the development of written contracts between firms and farmers in order to secure the partnership between firms, farmers and governments. As stated by the director of the Bavi Research Center: "thanks to the model of linkages between the 3 entities engaged in dairy production - the State, private firms and the peasants – consumers will enjoy the fruit of the development, which is 100% fresh milk" (Vietnamnet, 2015).

2.2.3 The new alliance between IDP and the local authorities in Ba Vi

In November 2007, after IDP had started to collect milk in the area, the company signed a memorandum of cooperation with the Ba Vi District. According to the terms of the agreement, the authorities of the Bavi district and the 3 communes producing milk agreed to:

- rent land long term to IDP to establish their plant in Tån Lĩnh commune (2008)
- provide all the administrative authorizations necessary for conducting business legally
- act as legal guarantor in the contracts associating IDP and the breeders and IDP and the collectors
- encourage the breeders of the Communes in the area to sell their milk to IDP exclusively
- grant exclusivity of the use of the certified trade mark "Ba Vi Milk" (sũa bò Ba Vì)

In exchange for which the IDP company agreed to:

- collect milk from the local population all year round
- ensure sales and stable prices for the entire production of those breeders affiliated to IDP
- ensure quality standards by installing a system of strict checks (samples, tours of inspection of the working farms and collection centres)
- finance part of technical training courses and information campaigns for the villagers to develop and improve milk production
- facilitate access to capital for breeders (for the development of dairy breeding)

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³ "Nhờ mô hình dụng chuỗi liên kết chăn nuôi bò sữa giữa nhà nước - doanh nghiệp - nông dân, người tiêu dùng được hưởng "trái ngọt", là sản phẩm 100% sữa tươi Ba Vĩ"

- participate in local development and generate revenues for the villagers involved in dairy production (breeders, employees, workers, etc.)
- respect the environmental protection laws

Implicitly, this partnership envisages the setting up of a quasi-monopsony, controlled by IDP, in the milk sector of Bavi. The closed system of this quasi-monopsony is ensured by the authorities of the district and of the commune, who deploy a range of strategies to protect the area from competing outsiders.

In 2011, with the support of the local authority, the IDP company launched a 2012-2020 dairy development program aiming at developing the milk production in the district through credit to farmers, improving breeding, developing new production techniques, supporting an industrial "demonstration farm" and eventually building a feed processing factory.

2.2.4 The use of the Ba Vi milk certified trade-mark to reduce competition

In response to the Melamine crisis, some quality labels such as "Ba Vi Milk" started to develop. Due to the history of the dairy sector in the District, and thanks to the proximity of the capital city, the Bavi milk had acquired a good reputation in Hanoi.

In January 2009, the Bavi district registered the certified trade-mark "Ba Vi cow milk" (sũa bò Ba vì) and the corresponding logo. The registration was done at the national organization for intellectual property (NOIP). The codes of practices of this certified trade mark included better control of quality and a better marketing strategy, based on the reputation of the area.

From 2009 to 2016, public authorities gave the exclusivity in using the certified trade-mark to only 2 companies: IDP and the Ba Vi milk company. The control was done by the district according to the codes of practice. In return, those 2 companies invested a lot of money in genetics, machinery, collection network, trainings, and credits to breeders.

The Ba Vi milk trade mark played an important role for securing the partnership between firms, farmers and the State in Bavi. Since the certified trade mark belonged to the District Popular Committee (property right), it allowed local authorities to manage the local rules of exchange in favor of a conception of control based on the partnership between State, farmers and private firms.

The exclusivity of the use rights of the certification trade-mark has excluded other companies to qualify, despite some of them would have been able to respond to the code of practices. Moreover, our interviews indicate that in addition to the certified trade-mark, the authorities

play a role in protecting the supply, the processing and the distribution of milk to the advantage of IDP. Aside from the small-scale industry production units that were there before the advent of IDP and which were not really in competition with the company (as they were producing different products) it would seem impossible nowadays for a competitor to set up in the locality to collect and exploit Bavi milk. The private-public partnership between IDP and the local authorities results in a quasi-monopsony in milk collection to the profit of IDP. This resulted in a limited competition in the area on the milk collection, and on the stabilization of the market.

However, the Ba Vi trade mark did not have a significant effect on the amount of milk collected in the area. At the local level, and also at the national level, the deficit in local milk was striking. This situation led to the promotion of large scale commercial dairy farms, shifting away from the peasant model.

2.3 The concentration of productive capital in large private firms

2.3.1 The shift in the livestock development policies

After ten years of public support of the small-scale dairy production, a new 2020 national livestock policy was launched in 2008. This Decision n°10/2008 was a clear shift to support large-scale industrial projects. It was followed by the decision n° 984/2014 on restructuration of the livestock sector, which also give priority to commercial farms and corporate agriculture.

2.3.2 The shift in the policy orientation towards liberalization

Some major laws were voted to ease the emergence of the private sector. The Law on Enterprise (LOE) and the Law on Investment (LOI) were voted in November 2005 and became effective in July 2006 (Ernst & Young, 2013). The Ho Chi Minh City Stock Exchange and the Hanoi Stock Exchange (formerly Security Trading Centers - STC) were established in 2000 and in 2005. As a result, combined market capitalization of both stock exchanges was 14 billion USD, or 22.7% the GDP of Vietnam at the end of 2006 (Wikipedia).

The liberalization of the governance structure towards more Foreign Direct Investments (FDIs) and capitalism also included the adhesion of Vietnam to international trade agreements. In January 2007, Vietnam became member of the World Trade Organization (WTO), and later on entered the ASEA (Agreement of South East Asian Association).

During this period, the Government of Vietnam pursued its reform program for the State-owned Enterprises (SOEs). "The reform has been conducted through the implementation of 4 key measures:i) reform of SOE management;ii) reorganise and reinforce state owned general corporations;iii) SOE equitization;iv) Transferring, contracting, leasing and selling of SOEs. The equitization process, which consists of transforming SOEs into share holding companies and selling part or all of the capital to employees and/or private investors, was initiated in 1991" (Ernst & Young, 2013). Since 2005, the equitization was not only limited to small and medium SOEs, but also covers large General Corporations such as Vinamilk.

A national support program supporting private firms investments in agriculture was also decided in 2013 (Decision 210/2013).

2.3.3 The emergence of an industrial farm in Ba Vi

This new policy context had a strong impact on the Bavi dairy-shed. In 2012, IDP decided to invest in a large-scale industrial dairy farm establishment on the Research Center. With around 250 dairy cows, this farm was a sign of a clear shift in the conception of control in the market.

But government authorities continued to support contracts between private processors and small-scale producers; and family farming still plays an important role. The empirical study of the relationships between private processors, collectors and breeders shows that their exchanges are regulated by a diversity of mechanisms between the formal and the informal, where obligations (social, moral and legal), coercive measures (sanctions), pragmatism and interests blend. The facts indicate that the current process of formalization of relationships hasn't undermined the importance of informal modes of regulation. The simultaneous presence of these two systems of regulation constitutes one of the conditions for the functioning of Bavi dairy-shed.

2.3.4 The new integrated mega-farms (TH milk; Vinamilk..;)

At the national level, many large-scale industrial farms have been set up such as the TH Milk farm (44,000 dairy cows in the Nghe An province), Future milk farm (1000 cows in the Tuyen Quang province), Some Vinamilk farms (5000 cows in 4 farms). Some of these farms are integrated to a dairy processing industry; some other are not (Nguyen Mai Huong et al., 2016).

We can summarize this historical process as follows (Figure 4). This local trajectory is strongly related to the shifts in property rights (on land, animals, capital and technical knowhow) and in governance structure.

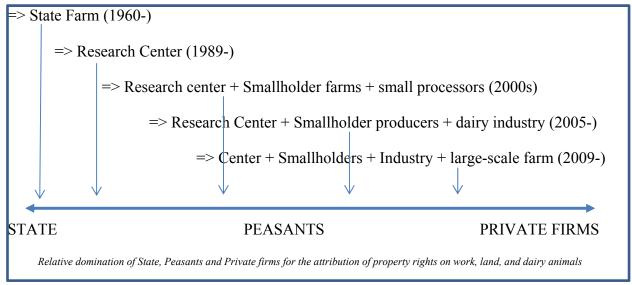


Figure 4: Historical trajectory of the milk industry in Bavi

This particular history has to be understood in a more general context. The analysis of governance structures, rules of exchange and conception of control allows us to better understand how the concentration of productive capital in the dairy industry has been an important feature of those changes.

3. Discussion

The Bavi dairy-shed development is based on a strong alliance between private firms (international and local) and government officials. The two largest dairy companies involved in this milk collection have been supported by public authorities, including by a certified trade-mark "Bavi Cow milk", which led to the establishment of a quasi-monopsony for the collection and the distribution of milk. This private-public partnership allows an efficient control of quality, but also appears as a strategy to protect the area from competing outsiders and thus control the milk price.

3.1 The question of equitable development

The absence of competition allows the company to enjoy considerable competitive advantages. For local authorities, this partnership is a way to keep a grip and the right to oversee the mechanism in operation, in production and distribution. It is also an effective method of guaranteeing the quality of the greater part of the milk produced in the locality. It

is, too, a way to promote local economic development in generating local income and employment for villagers, whether breeders, collectors, transporters, veterinarians, vendors of milk products, vendors of cows, company employees or workers etc. The financial interests of the population, local businesses and the companies are given back in part to the local authorities in taxes and duties. Lastly, general economic setbacks for the district as well as the efficient functioning of the system are a source of power and prestige for the local authorities. We have already mentioned above the series of advantages benefited from by the breeders within the system set up by IDP and the authorities. The guarantee of being able to sell their milk all year round at a stable price seems to be one of the most important. The presence of collection points near their homes is also often cited. The possibility of being able to sell the milk produced each day constitutes, in fact, a considerable gain for this type of daily production, which can't be stockpiled by the breeders. Lastly, access to interest free capital repayable in milk and to loans at preferential interest rates constitutes a considerable advantage.

The only negative aspect for the breeders is the question of prices. As stated by one collector of the Vân Hòa commune known for defending the interests of the breeders: "IDP benefits from exclusivity, and that is harmful to the breeders since there is no competition between different companies, it keeps the price of milk low." It is not, in fact, possible to bring competition into play to increase the price of the milk sold by producers, who are, in fact, fixed almost unilaterally by IDP.

If the mechanism of the framing of the system ensured by the partnership between IDP and the authorities currently offers undeniable advantages for all actors, it imposes the domination of a single company and unilateral control of the buying prices of milk, which leaves scant margin to the breeders for negotiation. These asymmetrical relationships are sources of tension between upstream and downstream actors of the value chain.

The fact that farmers organization play a secondary role is certainly a major reason why the transition has been profitable to major private firms, and less to smallholder producers.

3.2 An original capitalist system, highly controlled by the State and with limited competition

Our case study is an interesting example of the fact that "stable markets reflect status hierarchies that define incumbents and challengers, and that market leaders enforce the market social order and signal how crises are to be handled. [In such a stable market,] a conception of control is shared" (Fligstein, 2001, p. 97).

The Bavi case show how local dairy sectors are deeply shaped by global institutionnal changes (from colonization to land reform, cooperative, Doi Moi and globalisation). The current situation in Bavi dairy shed shows a kind of superposition of the logic of the recent period. From this mixture results an original socio-economic system: It's not a case of "standard market economy" nor "State capitalism" but a kind of capitalism system, partially controlled by the State and with limited competition operating in the frame of a strong State-Private cooperation / with a complex combination of official law and informal social rules and a strong interdependence between all actors, which allow the system to operate.

The State still plays a central role as a pioneer and regulator for dairy dynamics, but large company initiative, private actor strategy and interpersonal networks deeply determine the development trajectory of the sector, which is deeply dependent from national and international markets and prices.

3.3 The role of consumers in generating trust and legitimation of social rules

The dynamics of the social structure of the dairy market is related to another central element that we want to underline. The consumers play an important role in legitimating the governance structure, property rights, conception of control and rules of exchange. The necessity for dairy processing firms to generate consumers' trust into their products explains that the institutional arrangements are partly shaped by the expectations of those end-users. In that perspective, with notice the emergence of a new market for 100% Fresh milk, and more recently, a market for pasteurized milk. This shows that reputation, information on milk quality, and perception by consumers of the conception of control (in particular through packaging) might influence the issue of the transition. With respects to these innovations, education and media has played a significant role on the social arenas that shape the market social structures (Diaz Pedregal et al., 2010).

Conclusion

In Vietnam, globalization has led to a complete reorganization of the livestock sector, with institutional arrangements shaping the specific local trajectory in Ba Vi. During a first period that started at the beginning of the 1990s, the dairy sector was characterized by a coalition between peasants and the State. But after the shift that happened in the late 2000s towards liberalization policies, and in the context of the Melamine crisis that affected the Vietnamese dairy sector in 2008, this workers-State coalition was progressively replaced by a capitalist-

state coalition that allowed to stabilize the emerging market for mass-consumption dairy products.

The model proposed by Fligstein (2001) is particularly appropriate to understand institutional dynamics based on alliances between firms and government authorities. It provides some keys for understanding the role of the State in setting rules that stabilize the market. In our case study, we discuss this model in particular with regards to the role of consumers in the new institutional arrangements.

Institutional arrangements appear to be socially constructed, based on power relationships among actors and with consumers playing an important role in legitimating the arrangements. Because of that, the "livestock revolution" appears to be heavily influenced by local institutions, and might therefore highly differ in its form and in its achievements from one place to the another, depending on the repartition of powers among State, firms and peasants involved in this transition.

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