

Strengthening an Emergent Horticulture Cluster in Vietnam: Interest Group and Certification Trademark

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Abstract:

Like many metropolis worldwide, Hanoi has long sourced its vegetables mainly from a peripheral green belt close to the city. Soil and water pollution, plus land conversion for infrastructures, industrial parks and housing development have impaired this potential. Meanwhile, new production areas are emerging to supply the city's rising demand for fresh and safe vegetables. While new areas have greater access to available labour and land, they face the challenges of limited know-how, poor infrastructure and lack of an enabling environment. This article reports first achievements of a new methodological approach involving value chain research-and-intervention aimed to to strengthen the emergence of a new vegetables cluster in Moc Chau, 150 km North-west of Hanoi. In 2013, producers from 3 villages delivered 230 tons of vegetables to Hanoi supermarkets and specialised safe vegetable shops. The clustering process included the implementation of a multi-stakeholder vegetables interest group, experience-sharing trips and the setting up of a logo and certification trademark linked to the territory. The process also generated intense coordination both horizontally within the territory, and vertically along the value chain. Several challenges remain, such as upscaling this approach to a larger and ethnically more diverse beneficiary group, and promoting self-sustained local services. Moc Chau vegetable cluster is emerging rapidly and has capacity to meet new urban demands. The clustering process was boosted by the identification of common interests, an improved coordination among players, and the implementation of place-based labelling. Family farm clusters, under an enabling environment, can be responsive and efficient suppliers for the urban vegetable market.

INTRODUCTION

There is an urgent need to help decision-makers involved in domestic food supply at country and city levels foster and support new vegetable sourcing regions that will meet the growing needs of Asian cities. Feeding the burgeoning urban masses is “one of the most important food policy challenges facing Asia today and for the foreseeable future” (Pingali, 2004). In South-Eastern Asia alone, urban population increased from 228 million to 294

million between 2003 and 2013 (United Nations, 2014), or an average increment of 500 000 urban mouths every month.

Per capita vegetable demand is also on the rise. In the case of Vietnam, apparent vegetable consumption is higher than in South-East Asia, and keeps increasing. As shown in Figure 1, the vegetable supply between 2003 and 2011 rose from 82.6 kg to 90.7 kg per capita per year. Moreover, an international assessment across 52 countries indicated a consistent relationship between income and fruits and vegetables expenditures (Hall et al., 2009). Incomes in Vietnam are known to be significantly higher in urban areas than in the rural ones (Lê and Booth, 2010). Hence, the combined effects of larger urban population and of increased per capita consumption are leading to a fast-growing urban demand for vegetables.

In Hanoi as everywhere in Asia, the vegetable green belts in the peripheral zones of the city are experiencing dramatic changes. They are radically shrinking due to land conversion for infrastructures, industrial parks and housing development. In 2005, satellite images showed that 43% of municipalities in Hanoi had over 80% of agricultural area but by 2010, no municipality declared more than 80% agricultural area (Sautier et al., 2013). In 2002, 89% of water spinach and 38% of cucumbers sold at Hanoi wholesale markets were sourced from Hanoi close peri-urban area. In 2011, these values had decreased to 24% and 2% respectively (ibidem). It is predicted that between 2010 and 2020, agricultural land will shrink by 30% in this area.

Hence the major challenge of traders and city planners is securing new sourcing areas for quality vegetables in urban markets.

It is the purpose of our paper to contribute to meeting this challenge using the theory of industrial clusters grounded by Marshall (1890) and revisited for developing countries by Navi and Schmitz (1999). A cluster refers to an agglomeration of enterprises from the same sector on one same territory. These enterprises are located near one another and carry out similar or related activities. Their proximity gives rise to collective efficiency: such that as more buyers are attracted, market access is facilitated and new learning opportunities are created so that skilled labour develops. Further inputs and services are more easily available and result in more efficient logistics. These advantages facilitate growth in small steps. Clusters also give rise to convergence and coordination among players, which may make it easier to respond to opportunities and crisis (McCormick 2002).

This paper addresses the opportunities and constraints of fostering an emerging horticulture cluster driven by the urban marketplace. An example of successful vegetable cluster is Da Lat, a high-altitude area in Central Vietnam which name has become famous for all Vietnamese consumers for its high-quality vegetables. During the Hanoi off-season, Da Lat is a major source providing Hanoi in fresh vegetables. Its vibrant production processing and trading sector makes it the reference area for vegetables production and trade in Vietnam. But this success results from an experience of over 100 years (Eridan, 2007). Early steps in the clustering process are less frequently documented. Using the example of Moc Chau district in North-West Vietnam, we outline the actions implemented to give rise to a new horticulture value chain, and report the first achievements of this approach. The paper highlights methods that stimulate the horticulture clustering process, with emphasis on two tools: interest group and certification trademark. Finally the paper discusses the results and the significance of the clustering process.

MATERIALS AND METHODS

The research was conducted as a component of a collaborative research project on “Improved market engagement for counter-seasonal vegetable producers in North West Vietnam”. The project aims to underpin the development of a knowledgeable and resilient

smallholder-based supply system that can meet consumer vegetable requirements in a rapidly transforming urban retail sector. Research activities focused in Moc Chau district, 150 km away from Hanoi.

Region of Study

Moc Chau district, located in Son La Province, is 900 meters above sea level and has a cool climate. These environmental conditions have been identified by the private and the public sectors as a suitable area to develop counter-seasonal vegetable production during the months from May to October, when production in the Red River Delta near Hanoi is restrained by hot temperatures and heavy rains. The population of Moc Chau district comprises of diverse ethnic groups including Thái, Mường, H'Mông, as well as Kinh migrants from the Red River Delta. Moc Chau district currently provides Hanoi market with some well-known products such as milk and tea (both initially developed through state-owned enterprises) and plums. While Moc Chau temperate climate and mild altitude holds some similarities with the successful vegetable cluster of Da Lat in Central Vietnam, its vegetable production is still incipient.

Project Design and Activities

The project aimed to help set up and support a summer temperate vegetable supply chain for three villages in Moc Chau: in the communes of Dong Sang, Muong Sang and Chieng Hac, populated by migrant Kinh vegetable farmers from the Red river Delta. The project design covered four main areas:

1. **Consumers and markets** — surveys were conducted to determine urban buyers' and consumers' expectations, as well as trade facilitation.
2. **Production and supply** — producers received on-field trainings on “safe vegetables” good agricultural practices for tomatoes, cabbage, French beans, capsicum, lettuce and other crops. New inputs such as seeds were facilitated. In-field monitoring of production and harvest was conducted every two weeks.
3. **Farm book-keeping and certification** — all pilot farmers received training to record costs and technical protocols. The data such as weekly volume forecast was analyzed and feedback was provided to farmers. The farms were required to comply with the safe vegetables certification under the regulations of the Ministry of Agriculture and Rural Development (MARD).
4. **Clustering** — coordination of pilot farmer groups and other stakeholders in territory following the protocol as detailed below:

Methods and Tools used to support the Clustering Process

Clustering support activities were not restricted to pilot farmers. On the contrary, each step implemented aimed at liaising or benchmarking pilot certified farmers with other players in the territory or in the value chain.

1. **Baseline survey of 29 Communes.** Commune and village-level data of delta migrants and local ethnic groups were collected to assess vegetable production and constraints in all 29 communes of the district..
2. **“Vegetables Vision 2020” workshop.** This Workshop was organized locally, to generate awareness and linkages between farmers, traders, local authorities as well as some buyers from Hanoi.
3. **“Interest Group”.** A multi-stakeholder group was formed within the district to build trust and share understanding of key issues related to vegetables development.

4. Experience-sharing trip to Da Lat vegetable cluster. This trip was based on the topics raised in the Interest Group, and involved 3 producers and traders and 2 local staff and political authorities including the vice-president of the district.

5. Choice of 1 focal innovation. A decision was taken to prioritize one focal innovation: the implementation of a collaborative marketing tool.

The Vegetables Interest Group and the choice of a collaborative marketing tool were the key original steps in the method.

The Vegetables Interest Group

The Vegetables Interest Group aimed to build trust, share experiences and enhance collective vision. It therefore had a multi-stakeholder profile: Vegetable farmers and traders (both from pilot villages and from other communes), district agricultural staff and political authorities. The attendance varied from 10 to 15 participants.

The Interest Group focused on vegetables exclusively. Each meeting always combined local and external experiences. The topics of the meetings were chosen by the group members and included in sequential order: i) market information; ii) production planning and schedule; iii) inputs availability and production techniques; and iv) seedlings and pest management. Prior to each meeting, the participants answered one topic-centered questionnaire, a review of lessons learned from other experiences was printed and one guest speaker was invited. The duration of the group was temporary (in this case it lasted one year and a half), avoiding institutional burden.

The Interest Group gave public recognition to vegetable producers and traders, facilitated mutual understanding and prepared members to travel together and share experience with the Da Lat vegetable cluster. After the return from Da Lat, group members jointly decided to focus on one key innovation: a collaborative marketing tool.

Choosing a Collaborative Marketing Tool

A logo for safe vegetables from Moc Chau was designed. But it also had to be protected. In Vietnam, there are several intellectual property tools for protecting the reputation of product linked to its region. The Vegetable Interest Group made a choice to protect the logo with a certification trademark (CTM) rather than a Collective trademark (CoTM). The CTM was chosen for several reasons: i) there was a lack of any professional association that could sustain and own a CoTM; ii) by law the CTM owner is not authorized to produce nor trade the product, therefore the owner is able to better focus on the enforcement and control of the Rules of use; iii) the Da Lat cluster has already been established as a CTM.

RESULTS AND DISCUSSION

Project Outputs

Before detailing the results of the clustering process, the overall productive achievements of the project for the pilot farmers can be summarized as follows.

1. Production. During the 2-year study period, 43 Farmers (in 3 villages) were trained and accredited to supply safe vegetables to Hanoi retailers. The volume supplied in 2013 reached 230 tons, mostly during the Hanoi counter-seasonal months.

2. Market access. Targeted producers now sell 30% of their production directly to supermarkets (Fivimart, Metro, Oceanmart) and to specialized safe vegetable shops in Hanoi (BigGreen), as displayed in Figure 2. This new market for local farmers generated in 2013 a retail value estimated at about 460 000 US dollars.

Results of the Clustering Process

The undergoing clustering process displayed three main results:

1. The choice of a logo and of a Certification trademark. The logo gives visibility and attractiveness to the packaged products. The CTM protects the use of the name and enforces a set of Rules of use. Both logo and CTM refer to “Moc Chau safe vegetables”.

This forms an original combination of two important attributes for consumer trust: i) the safe vegetables certification (following MARD decision 106/2007/QD-BNN), and ii) the definition of a specific geographical area (following the map attached to the CTM registration application at Vietnam’s National Office for Intellectual Property - NOIP). The ownership of the CTM is conferred to Moc Chau district, which is a legitimate owner of the geographical name and which is training local staff to conduct the inspections after the project ends. In this process, the reputation of the place of production is not based on the sensory quality of product (as usually needed for specialty products, geographical indications). It is based on the compliance with "voluntary" food safety standards and the commitment of local value chain and authorities to support the enforcement of such rules.

The trademark registration is currently in process at NOIP.

2. Horizontal coordination within the territory. This coordination boils down to the creation of an enabling environment between producers, service providers and the local authorities:

The producers. The producers have formed 3 groups in the three villages, for a total of 43 farmers. Three years after the start of the project, many changes have occurred, such as: (i) Producers have mastered the techniques of safe vegetable production during the off-season; (ii) Production is organized in the groups to meet the production plans of given vegetable types and volumes over time; (iii) Information exchange on production and distribution has developed between farmers in the group and between groups; iv) One of the villages established a cooperative.

Farmer leaders have emerged in this process, whose enthusiasm and risk-taking capacities played an important role in organizing locally the collection and transport stages and in achieving success in building relationships with authorities in Moc Chau and with retailers in Hanoi.

The service providers. The project partner institutions initially played the role of service provider, delivering to farmer beneficiaries a number of services which are gradually being up taken by local human resources. Fresh Studio (FS) and the Northern Mountainous Agriculture and Forestry Institute (NOMAFSI) support farmers to gradually learn about safe vegetables production and to access the safe vegetable certification. NOMAFSI staffs perform in-field monitoring of each farmer every two weeks. Vietnam National University of Agriculture (VNUA) support farmers on the accounting of household production cost. FS has helped farmers to measure the effectiveness of each crop in each season. The Fruits and Vegetables Research Institute (FAVRI) and the Centre for Agrarian Systems Research and Development (CASRAD) helped the rural collectors connect with Hanoi market to sell products to the quality channel, such as supermarkets and safe vegetable shops.

The local and regional authorities. Before the project started operation, local government did not focus on vegetables, but mainly on tea production and dairy farming. Local authorities are now fully aware and supportive of the strong development potential of vegetables for the district and its population. Upon returning from Da Lat with the vegetables interest group, they opened low-cost credit lines for investments in nethouses. The district will have ownership of the Certification trademark “Moc Chau safe vegetables” and be responsible for

controlling its rules of use, in connection with relevant services at Province level such as the Agricultural Extension, Plant Protection, and the Agricultural and forestry products Quality management Service. The forthcoming 2016-2020 investment plan will include the vegetable sector among the economic priorities for the district.

3. Vertical coordination among the value chain. The project generated intense new vertical contacts and information flows up and down the marketing channels, between Hanoi consumers and retailers, local traders and producers. This improved mutual understanding and efficiency. For example, i) Producers and traders convened together in the vegetable Interest Group; ii) Hanoi retailers have come to visit and work directly with producers in Moc Chau; iii) Moc Chau producers and authorities received and discussed the results of surveys describing the expectations of Hanoi retailers and consumers, including the desired types of vegetables, with the quality and confidence expectations in product quality and safety; iv) project staffs helped connect successfully with some supermarkets and shops to sell quality products.

Collectors in each farmer group play a key role. They have to manage the trade-off between meeting the needs of distributors while selling only, or separating clearly, products from certified safe production. To help them perform their task, each Hanoi retailer organisation (supermarket or specialized shop) sets targets before the counter-season starts. Every Monday, the project supporting staff provides distributors with a precise information on the weekly vegetable production forecasts for each type of vegetable in each farmer group. The volume of each type vegetable is ordered by the retailer to the collector 2 days before delivery (supermarkets Fivimart). This frequently exchanged information is one of the factors contributing to the success of the project.

4. Challenges. Of course many challenges remain ahead, mainly the upscaling strategy and the development of self-sustained services beyond the end of the project.

Upscaling. While the project reached a strong impact by carefully selecting and intensely supporting the initial sites of intervention, a wider coverage is now necessary to make the cluster sustainable. Some upscaling is already taking place locally to new farmers within the pilot areas. But the objective is to extend the cluster to new communes which have been identified for their high potential. This extension will be done through a capacity-building plan creating training with materials elaborated from Phase 1 of the project ; and by developing intense farmer-to-farmer extension through the existing pilot farmers. It can be noted that the upscaling of counter-seasonal production appears to be less requiring and selective than the upscaling of certified safe vegetable production. Finally, upscaling requires to extend the benefits of the project not only to Kinh migrant farmers, but also to other autochthonous ethnic groups present in Moc Chau.

Self-sustained services. The second challenge consists in identifying and implementing local resources from the private and the public sectors in order to assume services currently being delivered by the project: trainings, market information, facilitation of inputs, technical monitoring and inspections, etc. The contribution of the local authorities will be significant but may be constrained by their limited financial resources. Many services will have to be covered by the price premium expected in the value chain. As the cluster strengthens and extends, these services are expected to become cheaper and more easily accessible.

CONCLUSION

Family farm clusters are efficient suppliers for the urban vegetable market. This conclusion stems from three dimensions of our results.

1) Encouraging local development. Peri-urban vegetable production faces serious limitations and instability for land and labour resources which cast a shadow on its future. Meanwhile, new, more distant production areas are effectively emerging to supply the cities' rising demand in fresh and safe vegetables. The experience depicted in this paper shows how a horticulture cluster has started consolidating in Moc Chau, 150 km from Hanoi. In 2013, 230 tons certified safe vegetables were delivered to Hanoi market, for a retail value of more than AUD \$.1 M.

2) Improving cluster methods. The clustering process consolidates these new sourcing regions by giving rise to collective efficiency in terms of learning, logistics and marketing. We have shown that it is boosted by the identification of common interests through an Interest group, the improved coordination among players including local authorities, and the implementation of place-based labeling such as a certification trademark.

3) Impacting at policy level. The paper shows that, under an enabling environment, local family farms demonstrate a high responsiveness to connect efficiently with retailers. Clusters of family farms have the capacity to produce the quantity, quality and timeliness expected by urban markets. Industrial companies are not the only model to meet the challenge of the new urban markets in Vietnam. As the Government of Vietnam (2013) is setting up a roadmap to restructure agriculture while sustaining rural smallholders' livelihoods, this result is highly relevant for Vietnamese public policy.

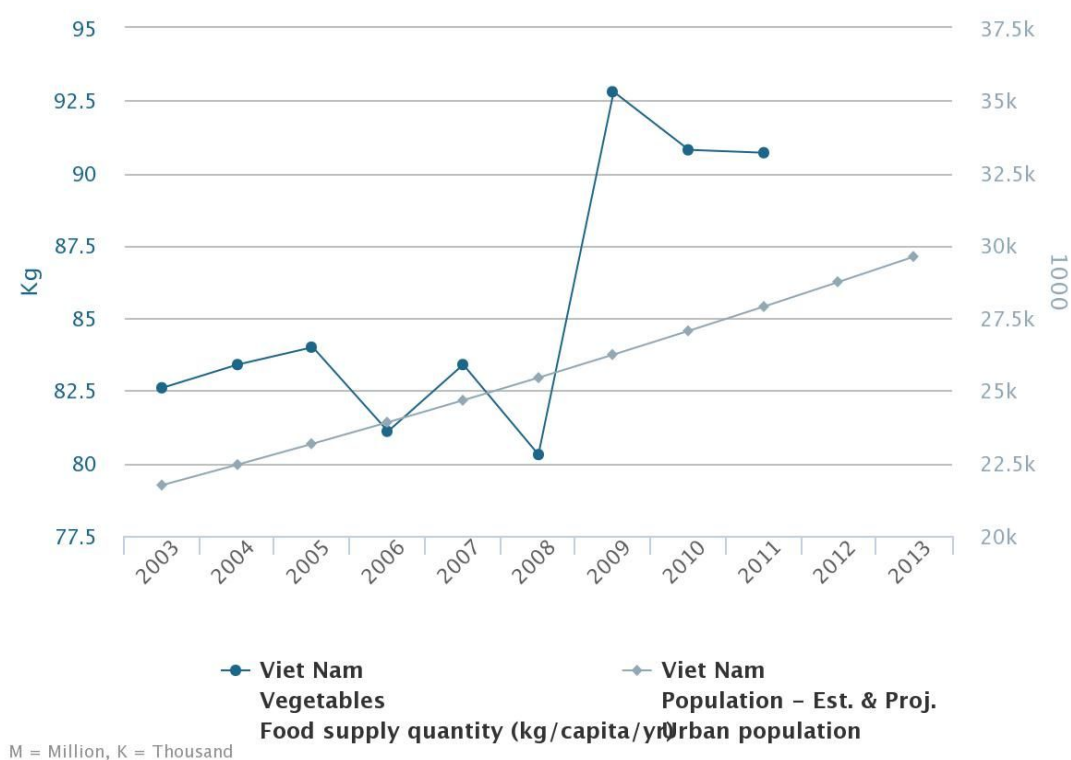
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Source: FAOSTAT

Figure 1. Evolution of average Vegetable supply (Kg/capita/year) and Urban population (million) in Vietnam, period from 2003 to 2013.

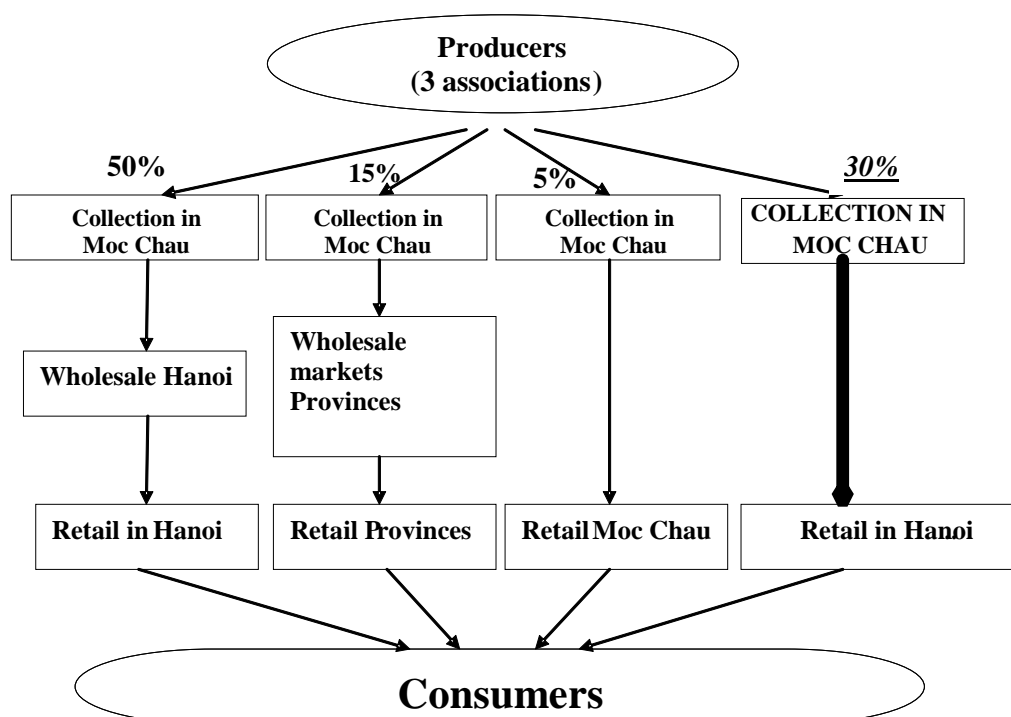


Figure 2- Marketing chains for Moc Chau safe vegetables producer groups in 2013, and the creation of a new marketing channel directly from producers to Hanoi retailers.