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A preliminary viability assessment of beef cattle value chains in the Central Highlands of Vietnam

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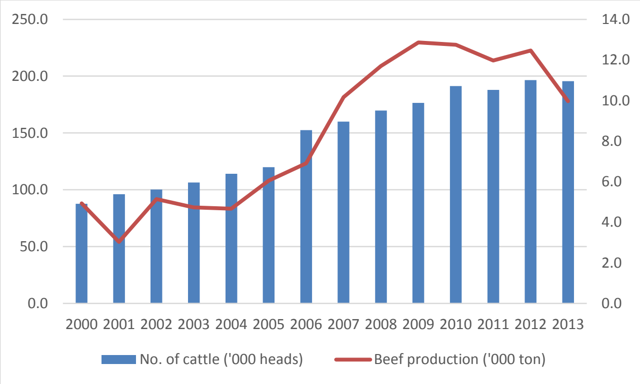
In Vietnam, meat consumption is dominated by pork (around 70% of the meat market share) followed by poultry and beef. Population growth, a booming tourism industry, rising incomes, and changing consumer tastes in recent years have provided a strong impetus for increasing beef production in the country. Vietnam has about five million heads of cattle and its beef production equals around 300,000 tonnes. There are only a few large-scale beef farms in Vietnam. Pasture lands are limited and the number of smallholders who have access to communal land for grazing is decreasing over the years. As a result, current domestic production only meets 70–80% of local beef demand; the rest has to be imported in the form of live cattle, frozen beef cuts, and to a lesser extent, fresh beef. Vietnam imported roughly USD 300 million of live cattle and USD 50 million of frozen beef in 2014, a significant increase on previous years. largely from Australia.

Due to shortages in supply, the retail price for beef is high, three times more expensive (at around USD 12–15/kg) than pork. Vietnamese beef competes with imported beef at the higher end of the market, including hotels, supermarkets, and Western and Asian style chain restaurants. Restaurants and supermarkets are developing swiftly in urban cities (particularly in Hanoi and Ho Chi Minh City), driving the surge in demand for imported beef. Rather than importing frozen beef, traders are importing live cattle and arranging the processing with local slaughterhouses. Beef from imported cattle is sold at lower prices in local markets than domestic beef. This has a negative impact on local beef producers since they are unable to compete with imported products, either in terms of price or quality.

Tariffs are low in Vietnam: 5% for imported live cattle and 10% for frozen beef. Following the removal of tariffs under the ASEAN trade in goods agreement, which enters into force in 2018, beef imports are expected to rise, representing a serious threat to the local cattle industry. Evaluating the current state of the beef value chain and the constraints facing the sector, this brief proposes feasi-ble interventions to achieve the sustainable intensification of cattle production in Vietnam.

While beef cattle production is dispersed throughout the country, some 50% of cattle herd population is located in the Central Highlands, according to the Ministry of Agriculture and Rural Development.

Figure 1: Cattle and beef meat production trends in Dak Lak Province



Source: DSO (2014)

In the past cattle were only raised for subsistence within a diversified livestock portfolio with pigs. Farmers kept cattle for draught power. Using available household cash reserves, farmers also bought new cattle as an investment. In such an environment, the link between livestock producers and markets was marginal. However, this has started changing with the government's intention of developing beef value chains in the Central Highlands in response to increasing market demand for beef. Smallholder producers who have realized this potential have actively started participating in beef value chains. Exchange of information and of best practices among livestock farmers has increased the number of households raising cattle for the market. Consequently, the number of cattle raised in Dak Lak province began rising in 2001, peaking in 2012 (Figure 1). Beef production followed a similar increasing trend, before falling more sharply in 2011. Most beef produced in the Central Highlands is consumed within Dak Lak province. In the past, it was also sold in Ho Chi Minh City and Da Lat. However, with rising incomes and living standards, Buon Ma Thuot City has become the main market for beef produced in the province.

Farmer and trader clubs

Figure 2 depicts the flows of cattle from primary production to consumption in Dak Lak province. Basically, there are three channels, distinguishable by destination market. The first channel is the most important channel for trade in cattle beef. The figure also illustrates the key importance of smallholders—defined as between 1–30 cattle per household—in beef production in the Central Highlands region.

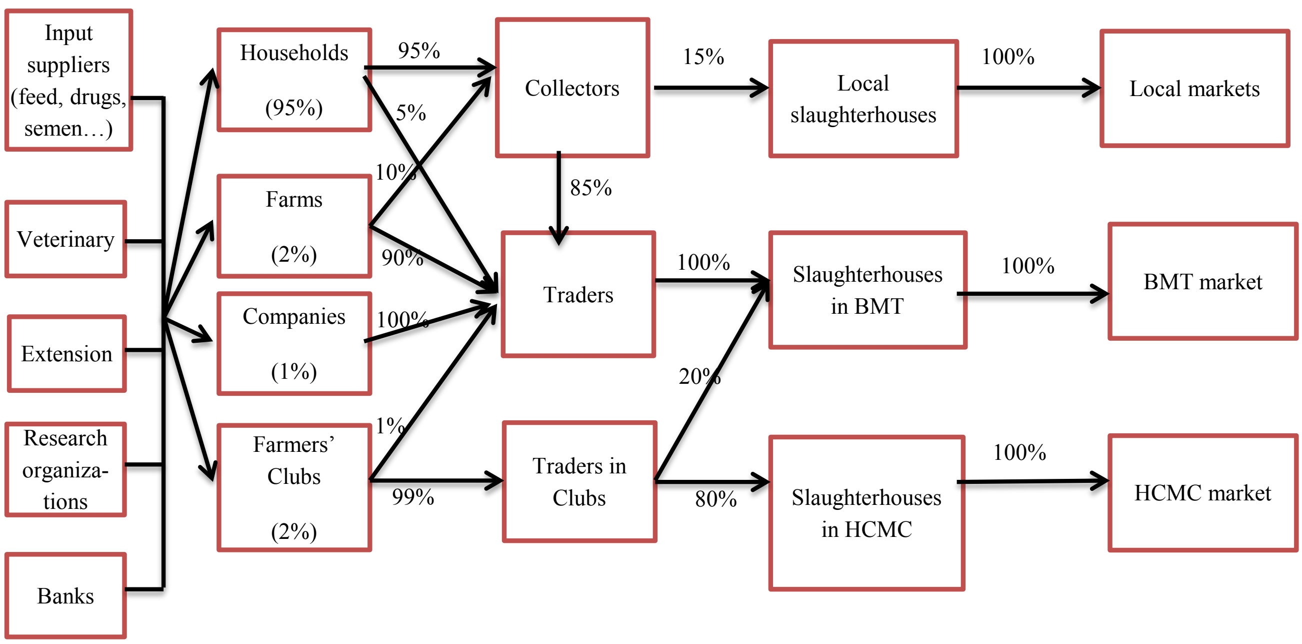
On average farmers own between two–five heads of cattle of mixed ages, fed together on the farm. Farmers have little negotiation capacity with their buyers and poor knowledge to predict correctly their cattle's lean meat performance. In this channel, local collectors purchase live cattle from farmers and then transport and sell them to local slaughterhouses. This channel targets local markets located in the production area. It is also connected to Buon Ma Thuot market via local traders who absorb a major portion of the cattle traded.

The second channel focuses on urban consumers in Buon Ma Thuot city. Approximately 90% of the cattle raised by large farms and 100% of the cattle raised by companies in the area are supplied to this market through a network of traders and slaughterhouses in Buon Ma Thuot city. According to criteria set by the Ministry of Agriculture and Rural Development, large farmers are defined as those which raise at least 50 heads of cattle.

There are also two state companies which specialize in cattle production and play a role as breeding farms. These companies produce and supply, a limited number of, improved calves to farmers in the region, as well as supply a small amount of fattened beef cattle to markets. This channel is still developing; the share of beef cattle distributed through it amounts to only 3% of the total.

The last channel is organized exclusively by farmer clubs that supply beef to outside markets, particularly to Ho Chi

Figure 2: Beef cattle value chain map in Dak Lak province



Notes: HCMC: Ho Chi Minh City. BMT: Buon Ma Thuot city

Minh City. Farmer clubs contain around 20–30 small farmers within a village or cluster of nearby villages. The clubs are self-regulated and self-managed organizations. The goal of the clubs is to facilitate production and trading activities of their members by organizing training workshops and field visits to exchange experiences, and by arranging contracts between members and large traders located in urban areas. Farmers in clubs raise cattle and then sell 99% of their production to traders who are also grouped in clubs. These traders transport live cattle to slaughterhouses located in Ho Chi Minh City. Transactions between sellers and buyers along the value chain are usually oral agreements based on trust, rather than formal written contracts.

The establishment of farmer clubs is a policy of the Vietnamese government so as to strengthen relationships and cooperation among small households involved in production and marketing. The experience of the cattle farmer club in Ea Kmut commune, Ea Kar district, illustrates the importance of farmer groups investing in the human resources to respond to the issues faced by their members. The club has hired three full-time traders, one technical expert and one veterinarian who provide the services needed by the members. By providing this expertise, the club remains attractive to its members as a source of technical advice and as a marketing outlet. This in turn encourages them to produce cattle for sale the club, thus sustaining the volumes needed for the club to be considered by city cattle traders as a trusted and regular supplier. The concept of farmer and trader clubs is an interesting business model for developing countries as it allows smallholder farmers to group their production to supply small-and-medium agribusinesses. This model could be particularly relevant for remote regions whose production volumes are too small to interest large businesses, but which are profitable enough to attract small and medium-sized traders.

Different destination markets set different cattle quality requirements. In general, urban markets in the second and third trading channels have stricter quality requirements than the first channel. For instance, markets in Buon Ma Thuot and Ho Chi Minh City accept young and heavy cattle. The local markets accept native 'yellow' cattle, which are usually small in size with a low body weight. This potentially explains why the 'yellow' cattle beef production of smallholders are unable to access urban markets.

Policy and intervention implications

The development of an efficient beef value chain from Dak Lak province will require a sustainable increase in beef cattle production and the attainment of production surpluses by smallholders. This requires technology interventions, improvements in market linkages, and the more active participation of the private sector.

On the technology front, the introduction of farm-grown fodder would have a substantial and positive influence on the development of beef cattle production; efforts to strengthen this practice should be increased. It is important that local breeds be replaced with crossbreeds to improve cattle body weight and beef productivity. Assisting farmers to shift from extensive to intensive cow-calf production also offers good potential to boost live-stock production. Vaccination programs should be put in place to prevent possible diseases; awareness campaigns should be conducted to inform farmers of vaccine availability. To achieve this, researchers should partner with extension services to increase farmer awareness of manure management practices, reducing environmental pollu-tion rising from manure mismanagement. Introducing a breed improvement program would be another necessary step to increase farmer awareness regarding breed quality.

On market linkages, there is a clear need for actors in Dak Lak to find markets in Ho Chi Minh City, which has the second highest beef consumption rate in the country. To be inclusive of smallholder farmers, new distribution channels would have to be linked to the first channel described in Figure 2. The farmer club business model should be granted legal status, allowing them the right to apply for loans and obtain recognized support. This is also key to the development of formal legal contracts between value chain actors, particularly between farmers and collectors, as well as traders. Improving the capacity of leaders and farmer club members in operational planning related to feed production, calf production, fattening, and marketing is vital for livestock development. Cattle beef farmers should participate in workshops to learn about emerging trends and markets in urban areas.

Finally, the private sector has a role to play in the value chain and in delivering support services to value chain actors. New business models to deliver microcredit would help meet cash shortages during the crop growing sea-son. Collectors, traders and slaughterhouses will need to invest in upgrading their transport and processing infra-structure to make the value chain more efficient. Further investment is also needed to improve the quality and hy-giene conditions of slaughterhouses and to rebuild them in non-residential areas.

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