Creating sustainable jobs and incomes to reduce poverty: lessons from bamboo supply chain development project in North West Vietnam

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Abstract

In North-West Vietnam, approximately 60.000 families are harvesting 70.000 has of bamboo, for a yearly output of more than 800.000 tons/year. Industrial bamboo is produced mainly in Thanh Hoa province, in the poorest districts. The supply chain is characterized by low efficiency of polluting SMEs and risk of unsustainable exploitation of bamboo resources. 70% of demand for industrial bamboo is for low added-value products such as bamboo culms for construction sector, pulp and paper factories. A large amount of waste is produced in workshops, such as sawdust, planning chippings, and node waste (60 to 75% of processed bamboo culms, compared to 5% in China).

In this context, diverse strategies have been identified to enhance economic development and contribute to poverty reduction. A first approach consists of local interventions involving farmers, collectors, traders, local SMEs and policy makers. A second approach focuses on major markets and leading firms, the objective being to introduce new technologies and increase the demand for bamboo culms with a view to impact positively at scale on bamboo farm gate prices.

This paper draws lessons from those different approaches: how can poverty reduction be effectively achieved and measured; which kind of development should be promoted, and how should one intervene in market systems without creating distortion, how should different approaches be combined?

It provides some recommendations for intervention and underlines the risk of early exposure to major external players, the latter having possibly conflicting strategies and shorter term agendas, which could durably undermine potential for sound and sustainable development, in particular regarding bamboo resources. It also highlights the need for working with and strengthening local actors in order to sustain better practices. Interventions should not focus solely on few bamboo market strands but target multiple bamboo and non-bamboo products and activities.

Key words:

Bamboo supply chain, poverty reduction, nascent markets, lead firms, linkages, inclusion, resilience, income diversification, sustainability

1. Introduction[1]

Thanh Hoa province: home of industrial bamboo in Vietnam

Thanh Hoa province is one of the poorest provinces of Vietnam, located 150-200 km South-West of Hanoi. Seven districts of the province belong to the 10% poorest districts in the country (61/640). Thanh Hoa North-West districts are mostly inhabited (about 80-95%) by ethnic minorities (Thai, essentially, but also Muong and H'Mong people). The poverty rate is higher than 50%, with a poverty line of 200,000 VND (0,35 USD per day per person). Luong bamboo (*Dendrocalamus barbatus* essentially) represents the main income source for about 30,000 families in the zone. North-West Thanh Hoa is the main production zone (about 70,000 ha) for luong bamboo in Vietnam (about 50% of surfaces over the country), even if there are still natural bamboos in natural (degraded) forests, like Nua (*Neohouzeaua)* or Vau (*Phyllostachys*). Bamboo culms are mostly processed in factories around Hanoi by few leading firms, procuring bamboo from surrounding mountainous provinces. Luong bamboo has good mechanical properties and big size, allowing diverse utilizations such as construction (scaffoldings), dykes reinforcement, chopsticks and paper pulp. Those products (70% of the demand for luong culms) are bringing low added-value. In parallel, high value products are also produced, such as flooring, panel boards, furniture, and handicrafts. Every year, in North-West Thanh Hoa, about 20-25 millions of culms are harvested, among which, about 35-40% are pre-processed in the zone and 60-65% "exported" as culms to the red river delta region, Hanoi, Hai Phong , Thanh Hoa and other big cities.

Main problems encountered by bamboo producers and supply chain

Agroforestry: underinvestment, overexploitation, un-sustainability

Most traders and collectors today are paying farmers according to the number of culms harvested, their size and weight, for low value products. The age is not considered as important for most of the buyers, except for pre-processing and processing workshops, as well as leading firms, requesting 3 years old culms. This is due to the fact that construction and paper industries do not require quality culms. Such practice badly impacts on yields (young culms are firstly contributing to the growth of new shoots) and decreases plantations productivity, farmers' incomes and long term sustainability of the supply chain. Besides, because of the low price paid for bamboo culms, farmers are under investing; in some places they are replacing bamboo by other more profitable crops (cassava, maize or acacia), and investors are reluctant to invest if resources are not secured over the long term. The most accessible plantations are overexploited, especially by very poor families, for whom luong bamboo is a bank for day-to-day petty cash needs (food, traditional events, medicines, school, etc.). There is therefore a need for investment in infrastructure (roads to access more remote plantations), but bamboo is no longer a priority for provincial and national authorities.

Supply chain: low efficiency, low added-value

As in the case of most supply chains in Vietnam, there is limited coordination between supply chain actors and no interprofessional organization. Leading firms (only few main companies) producing higher value products are not located in the province, bringing part of the added-value and skills to richer provinces (with better infrastructures, access to markets, human resources). Local SMEs are active but limited by a lack of skills, capital and access to market information. They are also highly dependent on a few buyers if they can not diversify their production. A diversified industry and increased competition would limit the dependency on a few buyers and enhance the sustainability of local businesses. The present oligopsony and the limited demand for higher quality production are indeed depressing prices at the expenses of small businesses and farmers. The industrial bamboo sector in NW Viet Nam is still nascent compared to China, despite few major players.

There are now 80-90 processors making medium and high-value products, but less than one third have a turnover greater than USD 500,000 per year. Of these, only a small number of companies produce high-value products such as flooring or panels.

Project intervention: main principles and achievements

With the main objective of reducing poverty by supporting local economic development, a partnership (between Prosperity Initiative Programme and GRET organization) has been established, aiming at: "Securing investment in new manufacturing plants for high- and medium-value finished Products; raising value added per bamboo culm across the industry (especially among primary processors) by identifying market opportunities for alternative higher value products and assisting small- and medium-enterprises (SMEs) to supply them; establishing sustainable buying mechanisms between buyers and farmers to ensure the sustainable exploitation of bamboo resources while meeting the needs of a growing industry; ensuring that poor farmers own the bamboo and therefore can benefit from rising prices and demand." (Mekong Bamboo 2008). Securing ownership is not an issue in North-West Vietnam, but an important one in Lao or Cambodia for instance.

A project that is being implemented by GRET (Luong Development Project or LDP)[2] since 2005 has been progressively designed to respond to the above mentioned problems. Some activities were related to farmers and resources activities: support to farmer organizations, development of links with enterprises and markets, and establishment of nurseries, plantations, trials and demonstrations, sustainable forest management, testing of short-term intercrops to get earlier incomes for new plantations. Other activities were related to the support to bamboo supply chain down stream: within Thanh Hoa bamboo industrial cluster, facilitate exchange between supply chain stakeholders, build capacities of entrepreneurs, support small and medium enterprises (business plans, trials for new products and process, contacts with buyers, equipments, and access to finance …), support marketing, relations with investors, and tests for diversification of production. Some complementary activities were related to sector enabling environment: discussion with local government on problems and solutions for smallholders and bamboo processing entrepreneurs, multi-actors discussions and seminars, capacity building of local actors, organization of meetings and visits, exchanges with external actors on bamboo.

GRET's strategy is to be permanently present in Thanh Hoa province to implement those activities. Additionally, since end of 2008, the national staff of the project has formed a local service cooperative, the objective being for this cooperative to become autonomous after project completion, as a local service provider. This comprehensive approach and the wide range of activities that had been implemented during the last four years has been driven originally by the private sector (Ikea), together with IFC[3], then by increasing support of donors, identifying bamboo as a strong opportunity to reduce poverty. In 2007, Mekong Bamboo programme did join this action on bamboo supply chain, partially funding the project and supporting major players (investors, leading firms) to increase demand for higher added-value product.

While some expertise has been mobilized for the design, implementation and impact assessment of the project, no analysis has been done yet on the overall logic of intervention and how it relates to existing literature on supply chain support. Based on project achievements and past exchanges with partners, this paper discusses different approaches for effective and efficient poverty reduction, which supply chain models to promote, and how to work with local stakeholders for sound market development.

2. Fighting poverty efficiently: raising prices of materials only, or increasing capabilities, creating jobs and activities locally?

Case study: production of mushrooms on bamboo sawdust

Bamboo processing is producing a high quantity of sawdust, particularly from the production of slats for flooring (longitudinal splitting). The project initially worked with one women's group and one small group (five persons), willing to invest in mushroom production from sawdust. It linked the groups to input providers, markets, organized technical trainings and exchanges visits, and provided financial support for the first small steaming kilns and drying kiln. Project financial support was considered necessary given that ethnic minorities in this poor area are not able to invest, and that it was necessary to demonstrate the feasibility of this new business. Three species of mushrooms for three different markets were produced: fresh mushrooms for local market and wedding events, dried mushrooms for urban markets and Linh Chi mushrooms for Vietnamese and Chinese medicinal markets. In early 2009, two years after the start of the intervention, 50 families were involved and 5 groups (2 women groups) created. This organization of production has helped farmers to produce mycelium to extend production, develop processing (drying, sorting, packaging), and be able to reach more markets thanks to a critical size of production.

This small activity, with limited initial investment, helped to create jobs for women; production was relatively easy to manage by beneficiaries after technical support and monitoring. It enhanced technical skills and marketing capacity, provided sustainable diversification of incomes, links with market, structuring of new supply chain, new links between families and communities. Besides, it is an eco-friendly activity, with no use of chemicals and possible re-use of substratum as organic fertilizer. This activity, which targeted very poor families, was highly appreciated and supported by local and provincial authorities. The fact that mushroom production is often seen by farmers visiting project achievements as a key activity they would like to implement themselves is also a good indicator of the attractiveness of such activity. Noticeably, as an income generating activity, it releases pressure on bamboo resources (main source of cash for farmers), allowing therefore better management of bamboo plantations. Such activity is also easily replicable, as it necessitates limited investment, for a high market demand.

Yet, the financial benefit is limited (a net benefit of USD 250 per annum per family for an average production) and the overall impact on poverty in the Region is obviously not significant. Should such small-scale and flexible approaches be promoted and supported by donors, in search of large scale poverty reduction and accountability, or should other approaches, more simple and replicable, be in priority funded? What are the theoretical and practical reasons for favoring an approach or the other?

Impacting on poverty at scale: how to reach poor farmers?

Some argue that if supporting businesses allows a market price increase, it will impact on prices for the bamboo culms paid to farmers and therefore, increase their incomes and reduce poverty. This approach is considering that market forces solely can eliminate poverty, and that other non-market interventions are less efficient, and therefore less relevant; it justifies large scale intervention with major players, at the expense of locally based lengthy, complex, costly and uncertain interventions, directly with the local stakeholders. It considers economic growth, measured in monetary terms per capita, as the central indicator to measure development. To demonstrate this vision, one can measure the impact of an increase of bamboo prices on farmers' incomes, and then extrapolate how many farmers could have crossed the poverty line.

This theory is nevertheless showing some limitations. Firstly, an increase of price can not be easily attributed to a given project, as it is dictated by world prices of bamboo and other factors (price of inputs, cost of workforce, etc.). Secondly, the real price increase is questionable in a context of high

inflation rates, when it is difficult to fix a proper rate and the error margin is important. Thirdly, the increase on bamboo price at farm gate can also possibly be relatively limited compared to other farmers' expenses (food, transportation, farm inputs). Thus, even if bamboo incomes did increase during a given period, it is likely, in case of strong increase of real price for many expenses, that most of farmers will be poorer. Finally but most importantly, in the case of bamboo production, an increase of prices without any farmer awareness and long term perspective could lead to overharvesting of plantations, bringing short-term higher incomes, but medium term declining yields and incomes, environmental degradation. Environmental degradation would in return nourish price increase, because of a lower offer of bamboo in quantity and quality.

Such impact assessment method would therefore overestimate the impact of bamboo prices variations at the expense of other important factors impacting also on poverty. It would then justify working without – or with limited - support locally to local actors, focusing on leading firms only in order to achieve this goal of price increase. Such approach refers directly to the "trickle-down theory," supporting that economic growth and technological change benefit the poorest, even if it is under the control of the better-off companies or people. This theory has shown its many limits in rich western countries, it is therefore undoubtedly questionable in poorer countries.

The affirmation that a farm gate price increase will be seen in case of increase of global demand is also questionable if we have a closer look at the Chinese model of development. For instance, in Anji county (Zhejiang province), one of 10 "bamboo homelands" in China, figures (Zhu Zhaohua, 2007) show that price increase is relatively limited: only 60% over 20 years time (1988 to 2006), if compared to increase in production value of moso bamboo products during the same period (210%). The production value is much related to utilization rate of culms (from 25% to more than 85%), but it did not impact much on the price paid to producers. It seems therefore that the expected trickle-down effect of an increase in demand and a better utilization rate on the price paid to farmers is not obvious. According to some findings (Perez 2007), bamboo producers in China are benefiting a lot from bamboo non-agricultural activities, including processing and sales, but those farmers are not the poorest ones. In Anji, most of farmers are also small entrepreneurs and are therefore able to invest in small equipments, new technologies, manage properly plantations, etc. Besides, bamboo production was and is still, but differently, strongly supported by Chinese authorities (subsidies for planting initially, research, promotion of investments, etc.). The hypothesis that people can be taken out of poverty thanks to an increase in demand, based on economic theory or on partial analysis of the Chinese model, is risky. Farm gate price increase should be considered as a priority (and not increase in demand), this not being left to market forces only. Other aspects of livelihoods – not only market factors – should be taken into account to reduce chronic poverty.

Sustainable impact on poverty: a need for a more comprehensive approach

For other development practitioners working on support to supply chains, a recommended impact assessment method (Bekkers, et al. 2008), is to measure, on the following aspects, if some significant changes had been observed: on project expected outputs (promoting new products, number of SMEs trained on specific issues); on outcomes (improvement of services to SMEs, launching of new products); on increased capabilities (change in linkages between stakeholders, awareness on market opportunities); on change in performances and competitiveness of SMEs (resilience to external chocks, increased productivity and benefits); on entry of new actors in the sector, attracted by supply chain up-grading; lastly, on increase of incomes and job creation due to better efficiency of production, new enterprises, or any other activities reducing significantly poverty. This range of tools is useful to measure impact on supply chain but of course does not to give a measurement of poverty reduction. This is nevertheless a more relevant approach to poverty

alleviation, as poverty, and more precisely chronic poverty is not only related to cash incomes, but it is a multi-factorial phenomenon.

As defined by Ponte (2008) “the distinguishing feature of chronic poverty is extended duration in absolute poverty. Therefore, chronically poor people always, or usually, live below a poverty line, which is normally defined in terms of a money indicator (e.g. consumption, income, etc.), but could also be defined in terms of wider or subjective aspects of deprivation. This is different from the transitorily poor, who move in and out of poverty, or only occasionally fall below the poverty line.” In this view, giving farmers more bargaining power, information on markets and better access to services (credit, inputs, etc.) is important. Diversification of income sources and better linkages to diverse markets is also important. In our example, mushroom production is important in financial terms, but it is also a medium to link the poorest farmers to markets, to show that small entrepreneurs can emerge and be successful. It is also a potential first step and first source of cash incomes to develop other activities.

This complex and comprehensive approach of poverty determinants is not necessarily welcomed by donors, interested by more specific and replicable methods of intervention. Supporting leading firms as a substitute to development practitioners, to demonstrate the liberal view of development processes - if done alone without strong local intervention - is ignoring the inherent causes of chronic poverty. In-depth investment on skilled human resources locally, to support local initiatives and strengthen local entrepreneurs, should not be forgotten. As described below, the quality of the economic development promoted is as important as economic development itself. In Vietnam, very few development practitioners are directly working with local SMEs, but such experiences are very rich ones that could serve as a reference if well documented and promoted at provincial and national levels. Other current trend from donors is the budget support to governments: transfer of important financial means for action to national entities shows an increased concern for the ownership of the development process, but does not provide necessarily added value in terms of intervention methods. Such approaches can be justified in terms of ownership and scale of impact, but experience shows that, even after decades of governmental support in Vietnam, local government bodies are still very weak, especially when it relates to market development.

3. Up-grading bamboo supply chain: which priorities?

Lessons learned from some innovations in Thanh Hoa province

So far, the support to the development of new manufacturing plants has not been successful. No major new investor did invest on bamboo supply chain to develop new technology. Some direct support to the Vietnamese bamboo leading firms to develop business plan, attract investors, and test new technologies is on-going and should help to increase bamboo processing capacity. The competition between two or three leading firms is still limited and this is impacting negatively on practices along the supply chain: bargaining power of pre-processing workshops is limited and supply chain management is based on short-term considerations, with no long term commitments and no investment on quality up-stream. This failure to attract new investors can be partially explained by the current economic crisis, but it is also related to the lack of attractiveness and competitiveness of the bamboo supply chain in general at the moment. Indeed, despite potential important demand, accessing new markets is very challenging for new comers and out of reach for most if not all of existing SMEs. Weak supply chains – in remote areas, with few small investors - are risky and are not efficient, for many reasons. Important investors, looking for secured and interesting returns, are therefore prioritizing investments on more mature sectors of the economy, mostly in richer locations (Mekong and Red River Delta), with more qualified workers, better infrastructures, easier access to markets.

At smaller scale, it was easier to develop new activities, as local stakeholders were more able to invest locally, investments being less important, less risky, and markets more accessible. For example, aware of the economic importance of secondary species for poor ethnic minorities, and of important markets for incense sticks in South Vietnam (Ho Chi Minh City) and handicraft baskets, the project has made the link between buyers, village authorities and small enterprises. Based on demand of a local small entrepreneur, the project has partly supported several weeks of vocational training for 20 villagers from poorest areas, to be able to produce quality round or square sticks. This activity created locally 20 new jobs, mainly for women, and was an opportunity to add value to secondary bamboo species from natural forests. 100 families used to produce rattan woven bamboo products, were supported to produce and sell bamboo baskets (with new design and better quality), through a local co-operative.

Other locally supported activity has been the building of one pre-processing workshop by the end of 2006 with project support, to produce slats for flooring and chopsticks. The pre-processing locally (near bamboo plantations) was indeed identified as a key priority to improve bamboo supply chain efficiency for the flooring market (less transportation costs and better quality control in particular). However, this business progressively reveals not being profitable – at least temporarily - because of low selling prices of chopsticks and slats, difficult quality control (age of culms in particular), quite remote location from luong bamboo main production zones (high transportation cost), and local market down-turn for bamboo flooring. The project supported the entrepreneur to find new market opportunities (visits, linkages) and the workshop started to produce woven slats for panel boards (used for construction, shrimp farms), a product that is currently imported from China. This production allows much higher utilization rate of raw materials (60%) compared to chopsticks and slats processing (20-25% as a maximum), more added-value and additional job creation. By-products (40% of wastes) are used to produce woven mats and other handicraft products, which enjoy high market demand. Such switch of production is creating much more work for the same quantity of bamboo. In the current situation, with overexploitation of bamboo, this strategy is more profitable and sustainable. In this case, the project facilitated linkages with buyers and provided useful market information, but didn't interfere with local actors. Convinced that this activity was more profitable, the entrepreneur did switch his business model and is today less dependent on the flooring market. If the first strategy (support the development of pre-processing for flooring) revealed not being successful, entrepreneurs were nevertheless able to cope with a new situation and diversify products. Without project intervention, the pre-processing workshop would have probably stopped its activity. This intervention is questionable as it can be seen as a market distortion, the project trying to help in particular one actor at the expense of others. On the other hand, initial investments were used to produce new products, more profitable ones. Therefore project support had been useful to diversify market outlets and reinforce the resilience of this entrepreneur to market fluctuations, as well as other actors later on, eager to follow this example.

Discussion

The examples above are showing that large scale investments are difficult to promote. Besides, when supporting major players (which are not locally based due to the weakness of infrastructures) there is no guarantee that the latter will necessarily invest locally and reinforce local actors. The link between major firms and local actors is indeed very weak in Vietnam, vertical integration being non existent and collaborative approaches not yet common on bamboo supply chain.

Stefano Ponte (2008) demonstrates that "integration of people or areas into global value chains and trading relationships will exacerbate chronic poverty if the 'normal functioning' of these chains is left unchecked. This is especially the case for value chains that are driven by retailers and branded manufacturers. Where value chains are less clearly driven from Northern-based actors, integration in even 'normal' strands of value chains can have substantial and positive impacts on poverty, and where appropriate, chronic poverty. In other words, the conditions of inclusion in and/or exclusion from value chains and trade more generally are more important than inclusion and exclusion per se."

Ponte is asking to be cautious on how to support supply chains, and is demonstrating how a too fast and too strong connection to global markets can endanger local stakeholders. As it was demonstrated within the project, it is more feasible to support local SMEs to reach emerging small markets, even if the overall impact is limited. Doing so, entrepreneurs are progressively exposed to diverse external markets, the local autonomy is slowly growing, capabilities are increased and the supply chain is becoming more resilient to market changes. Supporting local and reachable markets also allows easier starting of small scale production, trials and errors. At this scale, a project can support partially the risk; provide small grants, be involved with limited expertise on market prospection. The above short case studies are showing that inclusion of actors locally was possible because entrepreneurs found opportunities to invest with limited risk, in a known – close – business environment. More profitable but more distant and risky markets have not been explored by local entrepreneurs, despite project support and sufficient private investment capacity. Moreover, the current crisis is showing that external funds are more volatile than local money, the later being attached to local networks and commitments (political, familial, and economical). Lastly, experience showed that global investors and leading firms are more reluctant to invest in nascent industry and prefer to secure existing and reliable investments.

Such trade-offs when supporting supply chain stakeholders should be clearly identified, support and mitigating measures strongly supported. It means that the pace of supply chain support and promotion of competition should be wisely assessed. As mentioned by Ponte, the conditions of inclusions are, for this kind of nascent markets, more important than inclusion itself. Sustainable production (taking into account economic, but also social and environmental aspects of production) is necessary for a sound development. In Vietnam, leading firms still have low awareness about the benefits they could receive from a better and more responsible management. It is therefore risky to support such actors if the conditions of support are not discussed to try to improve the impact of their practices up-stream with suppliers, poor workers, farmers and bamboo resources.

If there is no “big bang” impact to be expected from such local and small scale support, it is more responsible and sustainable to give priority and seek for local markets, not to depend too much on international markets and leading firms, and a positive dynamic within a production cluster can facilitate replication. It is indeed critical to increase capabilities locally and sow the seeds of future endogenous development. If this approach can appear frustrating to development practitioners or donors – seeking short-term visible results– it is nevertheless more adapted to local actors’ capacities and expectations, and therefore facilitate ownership of promoted activities.

Businesses and other supply chain stakeholders should consider their medium term interest: more investment up-stream and better integration of suppliers would help to increase quality, secure supply and diminish transaction costs and risks. Indeed, transaction costs are high because lead firms are procuring on bulk bamboo markets; it therefore necessitates sorting culms, controlling quality and age of culms. This approach is currently risky, as it is difficult to control quality properly. In the current situation, a leading firm producing bamboo flooring estimated that 10 to 20% of culms did not reach quality requirements. With a better integration up-stream and traceability, farmers would cut only quality culms, improve bamboo plantations management, and therefore have significant positive environmental impact.

Local entrepreneurs, more embedded in local dynamics, should be linked to leading firms to promote those sustainable practices. Facilitating linkages along bamboo supply chain in Vietnam, from farmers to leading firms, is a key issue for better efficiency and sustainability.

4. Intervention methods: finding the balance between interference and indifference

Creating new markets: the example of bamboo active charcoal

Before project intervention, there was no significant production of active charcoal from bamboo in Vietnam. This production necessitates kilns building, technical and financial support for first burning cycles, and markets. There is a large diversified potential market with high demand: charcoal from wastes (lowest prices); tube charcoal (small-sized luong or other species, presented in bamboo baskets). Wastes of active charcoal and active charcoal itself can also be used to produce activated carbon, for which Vietnam has to import more than 95% of production. The project is currently supporting the development of a production plant for activated carbon, local investors and responsible businessmen being ready to invest. Despite this high potential demand, local entrepreneurs were not able to take this opportunity alone and supply distant national markets or international markets.

The minimum procurement for active charcoal being one container – i.e. the capacity of few kilns during few weeks - it is out of reach for most of local SMEs. Taking into account this demand and the critical size needed to reach markets, local entrepreneurs were supported by the project. The latter invested initially in the building of few kilns (hiring highly skilled workers from other provinces, convincing entrepreneurs to invest in materials and land), the majority of other kilns being built with the support of a foreign investor from the Region, seeing interest in diversifying its production sites. In addition to the construction of kilns, accessing this market necessitates costly analyses and certificates. Samples were analyzed by the project, specifications for procurement developed. For the production of activated carbon, investments and technologies needed are much more important, and the project is in this case acting as a broker to attract investors, disseminating information and advocating for local investment.

As described above, there was initially very limited supply of bamboo charcoal, and there were many entry barriers that could not be lifted by local entrepreneurs alone: financial, but also technical ones. Given the potential economic but also environmental impact of active bamboo charcoal (bamboo charcoal as a substitute to wood charcoal), the project considered that this new product was strategically important to develop. To date results are still limited to few sales of bamboo active charcoal, but if activated carbon is produced, it would have an important impact on local job creation, poverty reduction, and would also help Vietnam to limit imports of activated carbon.

Is such strong and external support justified? Is there a risk of market distortion in this particular case? Can a project so strongly interfere with the local economy? If major similar opportunities are identified, what are the alternatives for a project willing to help local businesses, if direct intervention should not be – in theory – recommended?

Discussion

The current recognized best practice when supporting supply chains in order to reduce poverty can be found in “market working for the poor initiative” (M4P) synthesis (2008): “M4P is an approach to developing market systems that benefit poor people, offering them the capacities and opportunities to enhance their lives. […] M4P requires that organizations play a facilitating role. Standing outside of the market system, facilitators work with different players within the system, to make it work more effectively. Their essential role is active and catalytic, to enable others to do rather than do themselves – stimulating changes in a market system without becoming part of it.” The definition of “within” and “out” of the market system is important here. In the example above, we can say that the project is “out” of the market system when facilitating contacts between investors to develop an activated charcoal production plant, but we can say that it is “within” when subsidizing the building of kilns for active charcoal, helping entrepreneurs to buy new machines,

searching actively for outlets for a new market. This choice to support directly local entrepreneurs to develop new markets is a risky and strategic one. The project is accepting to support partially a risk with stakeholders they are working with. Doing so, they are becoming part of the market system, which is contrary to best practices promoted in this field. But when the role of projects is to act as service provider, to facilitate linkages, strengthen entrepreneurs, it is sometimes difficult to identify the limit between market support and market distortion. Is it justified to support one pre-processing workshop if the manager is facing difficulties with buyers? How far the project should support this entrepreneur, share the risk with him?

One could argue that if local entrepreneurs can not invest themselves, leading firms could be major players. Some experiences had been conducted by the project with leading firms but it was not successful, short-term commercial views overtaking longer term agreements. The above paragraph stressed that in the current situation it is easier for SMEs to sustain growth locally, as no proper linkages are in place with leading firms. In Vietnam the latter are indeed exerting pressure for cost reduction and compressing the margins of their suppliers, more especially in a situation of Oligopsony, as it is the case in Thanh Hoa. Before lead firms being able to contribute to local development, a long term intervention to up-grade supply chain for more collaborative approaches is necessary, involving leading firms and promoting responsible business and sustainable management of resources; in parallel, a short term strategy to support in priority SMEs and favor more competition between leading firms is also important to create the conditions for sound future development.

To facilitate local sustainable development at scale without leading firms and with limited project intervention, attracting responsible investors is recommended: it means that market development will not be artificially supported and that better practices, more sustainable development will be favored. It is the case for instance for the bamboo activated charcoal. When investors can not be identified, it means that the risk is too high for them. If the project is investing instead of private actors, then the decision process should be very methodically justified (environmental impact, poverty reduction, cleaner production, etc.), and the risk should be supported and accepted by donors. Doing so, the project and donors are setting a – more or less formalized - public-private partnership promoting innovation, more responsible and sustainable businesses. As noted by Warner and Kahan (2008), such involvement of donors can make the venture more attractive to other potential investors.

When development practitioners are operating in disadvantage areas, even if a real potential exist, it will not be easy to attract investors or have the support of leading firms, the latter having often short term strategies and constraints not compatible with long term and balanced development of nascent markets. Supporting directly and strongly SMEs, in this context, should not be disregarded as market distortion, as – in fact – market should be modified, in the sense of better functioning, more innovation, diversification of production, etc. To achieve this goal, public financial support (from donors and local authorities) can be used to support local actors and attract private participation into risky supply chains. Lead firms have also an important role to play, if they agree to promote more sustainable practices, for their long term interest. They should therefore not be opposed to SMEs or farmers, but linked up-stream as much as possible to increase awareness and long term commitment.

Conclusion

Up-grading bamboo supply chain for poverty reduction is a common objective of many development actors in Vietnam and in other countries. The Chinese model is attractive as it showed - in the richest provinces of China - a huge potential for jobs and value creation. Yet, determinants of poverty reduction are very complex and embedded in local situations (social, political, cultural, environmental) and global economic evolution.

Connecting local actors to global important markets can seem attractive to some experts as it could in theory have huge impact on demand locally, prices paid to farmers. But prices are determined by global factors, and experience shows that price increases are rarely significant at farmers' level. In the case of Vietnam, leading firms have the capacity to procure any materials – including pre-processed bamboo culms, in virtually any country from the Region, at lower prices if necessary. The bet that a "big bang" can appear with new technologies or big investors is therefore hazardous and impact on prices would anyway be diluted before reaching farmers if linkages up-stream are not improved, in a sustainable manner. Such work needs time and local investment, which are not necessarily compatible with the pace of investors or leading firms.

Lessons from experience are showing that the priority should be on increasing capabilities and promoting sustainable practices locally. This is possible if relatively small innovations are promoted and supported by local entrepreneurs. If the impact can only be limited in terms of scale, it is stronger and of major importance in terms of ownership and sustainability, resilience to external chocks. A too rapid and massive intervention on a nascent market would not give enough time to local actors to adjust to the new situation. As agricultural systems are quite rigid and fragile, resources could be threatened, but also the local economy. If in theory a liberalized market allows easier destruction and creation of businesses toward more efficient systems, in disadvantage areas such processes can inhibit local initiatives and mitigation measures for nascent markets can be justified.

Sowing the seeds of future economic expansion at small scale, locally, is not gratifying but is necessary for the development of nascent markets, in poor and often remote areas. The fact that some products are not necessarily promising in financial terms– such as mushroom production or bamboo baskets – does not mean it should not be promoted as it can have longer term structuring impacts. Diversification of productions and job creation, linkage to local markets, capacity building, and empowerment of actors are fundamentals that can not be easily measured in terms of contribution to the economy but that are however crucial for sustainable and responsible development. If such fundamentals are in place, linkages down-stream with leading firms will become more relevant and less risky for the local economy and bamboo resources, market development being sustain by a more resilient and more sustainably managed supply chain.

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Endnotes:

[1] Sources: Gret documents (Luong Development Project) and Mekong Bamboo programme

[2] Project funded by various donors to support the bamboo supply chain in Thanh Hoa Province

[3] International Finance Corporation, World Bank