

Connecting new value chains with local economic development

International trade brings sustainability to Central Asia

The growing demand for organic and fair traded commodities on the world market provides producers and buyers opportunities to strengthen their relation and improve sustainability in the value chain. What are the challenges of building an international supply chain to foster local economic development?

By Herman uit de Bosch and Marnix Wolters

The natural Walnut Forests in Central Asia are a unique socio-ecological system and potential source of livelihood for the rural population. Due to the political and socio-economic changes after the collapse of the Soviet Union, the traditional system of utilization of walnut forests does no longer provide sufficient income to the villagers. As a consequence, the utilization of these forests has increasingly become unsustainable and their area further declines (Orozumbekov et al. 2009). However, great opportunity exists to develop a processing base to add value to local walnut products for regional and international markets, e. g. through the manufacture of processed foods (Bourne 2012). In regard to this opportunity a consortium of different stakeholders aims at joint technology development and dissemination to build a sustainable walnut value chain in Central Asia in order to foster the development, transfer and dissemination of technological and social innovations among Kyrgyz smallholders and other value chain stakeholders, as well as to ensure local and international market development and access.

Situation of the Kyrgyz walnut sector

Together with major European snack producer Intersnack and local processors Vega Plus and Oro Isfara, FairMatch Support currently develops walnut supply chains in Kyrgyzstan and Tajikistan. These supply chains link collectors of natural walnuts to local processors for supply to the European market through Intersnack. The development of these supply chains sets an example for the joint involvement of public and private entities in using market opportunities to embed sustainability throughout the supply chain. Providing insight in their approach in Kyrgyzstan, the parties involved share their experience obtained during this project that is implemented with financial support of GIZ and ICCO Cooperation. For Intersnack

this is part of a broader sustainable sourcing strategy. The projects in Central Asia therefore are not a standalone.

The production of Kyrgyz walnuts takes place in natural forests in Southern Kyrgyzstan. In state forests located in the southern region of Jalal-Abad approximately 41,000 hectares of forest can be found in which more than 50% of the trees are walnut trees. Local families obtain long term lease contracts from the government for sections of forest. In these forest plots of approximately five hectare the tenants have the right to collect walnuts and other forest crops. After showing the government their commitment during a short term lease of five years the collectors qualify for a long term lease contract (49 years) for the plot. During harvest (October-November) the tenants gather their families and relocate themselves to their rented plots for two months. Schools close as children join their families to work in the forest. In the areas that have been selected for this project over 5,000 families collect walnuts in this way, involving an estimated total of 25,000 persons.

Having their origin in a natural forest, both advantages and challenges are connected with the Kyrgyz walnuts. At the moment the majority of the collectors does not invest in the forest but merely collects its harvest. The forest is considered as a given fact that does not require maintenance. Without investment in the forest there is however a serious risk of depletion of its resources. When the production of older trees drops, no replacement of these trees is performed, reducing the overall yield. The forest consists of many different types of walnut trees, each with their own characteristics regarding size and difficulty of cracking. When proper forest management is performed collectors can replace trees with reduced productivity with better yielding local varieties and thus improve their income in a long term sustainable way.

Analysing the value chain

The current archaic value chain is facing quite some difficulties; the management of the forest is far from optimal and without investments and good forestry management the production will decrease in the coming years. The international labour organization convention is often disregarded as children participate in the harvest process and are withheld from school during harvest season. Processing and trade on the other hand is far from meeting European standards on food safety and traceability.

The walnut trade is organised in an informal and non-transparent way. The walnuts collected by the forest tenants are

traded in shell by each collector individually, often to middlemen or small traders who sell the product on local wholesale markets. Most collectors do not calculate their cost (rental fee, labour, transport) but sell according to the market price.

On the wholesale markets two main types of buyers are active. First mainly women purchase nuts which they crack at home. This cracking is performed manually and is often a family business involving the entire family. The kernels are sold on the wholesale market to local traders and processors. Some of these processors also buy raw walnuts and distribute those to families for cracking. The families return the kernels directly to the processor and are paid for the cracking at home. The home processing of walnuts in this informal setting implies serious risks to food safety as there is neither incentive nor any control for clean processing.

In both cases the processor operates facilities in which the cracked kernels are manually cleaned, sorted, dried and packed for export. The facilities in which the processing takes place are far from complying with European food safety standards. These walnuts are mainly exported to China and Turkey, of which limited volumes are expected to reach the EU market after further processing in Turkey. Due to the current set up of the walnut supply chains in Kyrgyzstan a lot of potential for both producers and local entrepreneurs is disregarded.

Opportunities in the restructuring of the Kyrgyz value chain

Referring to the old unsustainable structure in the Kyrgyz walnut sector, the main objective of all partners was to improve the capacity and the way of organizing all partners in the value chain in a more sustainable and successful way. Together all partners expressed their intention to develop a sustainable walnut value chain that aims to:

- Organize the collectors into cooperatives that trade as a collective;
- Improve forest management practices;
- Improve linkage between supply chain actors;
- Improve Food Safety and product quality;
- Improve working conditions for local employees;
- Become Fairtrade certified;
- Introduce ecological principles of sustainable use of forest resources; and
- Pilot the establishment of high production nut and fruits plantation.

By presenting the collectors a market that is interested in sustainable produced walnuts, a financial incentive is presented for sustainable forest management activities. Forest users such as the walnut collectors should learn about the long-term effects of forest management activities and their involvement, turning them from forest users to forest managers. Thus, collectors that have been trained on forest management practices in the supply chain project safeguard the long-term availability of walnuts and protect the unique story of the Kyrgyz walnut forests.

Restructuring the supply chain in such a way that collectors are more involved in the supply chain reduces the number of actors handling the product. By organizing collectors in cooperatives, they become interesting business partners for local processors, offering substantial volumes. The increase of volume improves their trading position towards the processor. A direct connection to the origin provides the processor with better control of incoming raw material.

Fairtrade certification of the supply chain makes the added value recognizable for consumers. They are willing to pay extra for the story behind the walnuts, and support the collectors. This enables the processor to pay a guaranteed price for high quality raw materials, stimulating the collectors to improve their products and income. In addition to the improved price for the raw material, sales of Fairtrade walnuts will generate a Fairtrade premium. The collectors can use this premium to improve their livelihoods and the infrastructure of the cooperative. It enables them to participate more efficient in the supply chain but also to improve forestry practices which will help to increase yield and avoid depletion of the natural resources.

Improving processing practices provides the processors direct access to high end markets, such as the European Union, diversifying their outlets and increasing the added value generated in Kyrgyzstan.

Improving the value chain in the Kyrgyz walnut sector

In this value chain development project, FairMatch Support introduced its integral approach to supply chain actors in creating a chain from field to fork, helping companies in finding new sources and producers in finding new markets. High quality standards, realistic profit distribution and long-term collaboration are the basic values. A successful future-proof chain is based on collaboration. In order to balance production, trade and consumption, FairMatch Support independently identified and linked all chain parties required and ensure that the quality of the weakest links improves. All parties are stimulated to invest in the direct linkage between themselves, thus increasing understanding and motivation for improvement at all levels. For processing facilities, it is hard to fill the processing capacity if they have to buy their raw materials from individual farmers. Often the sourcing of raw material therefore is organized through independent traders and middlemen. Working through direct business relations with farmer aggregations will create considerable efficiencies in the supply chain. The project aims to realize sustainable business linkages, wherein costs and benefits are matched and integrated in the margins. These direct linkages will also improve the traceability of the product. Supported by the FairMatch Support project team, in close cooperation with international non-governmental organizations and the project partners, the following improvements have been made.

Collectors

A cooperative of forest users has been formed and trained, enabling the participants to jointly trade their harvest and create critical mass that enables direct trade with processor Vega Plus. Through these direct linkages with Vega Plus the collectors can be rewarded for high quality nuts that originate in a sustainable forest. Thus, after forming the cooperative, preparations for Fairtrade certification were made. It brought the insight that the current involvement of child labour during the harvest is not only a violation of international rights, but even of local legislation. Supported by the Fairtrade Labelling Organisation, the cooperative developed a child labour policy and is currently raising awareness amongst its members. Doing so, the cooperative sets an example in the sector, motivated by the direct trade and the additional income of Fairtrade sales.

Processors

The direct trade between the new formed cooperative and Vega Plus facilitates quality improvement. In order to supply walnuts to the European market, Vega Plus changed its position in the supply chain, increasing control of product quality and food safety. In the archaic middlemen structure the origin of the product was unknown to the processor. By purchasing walnuts in shell and taking cracking indoors, the entire process from shelling to packaging now takes place under one roof. The first steps of Hazard Analysis and Critical Control Points implementation made the company and its employees aware of food safety risks. Supported by both the project team as well as new business partner Intersnack the company developed internal procedures and quality standards. Before, quality requirements never reached the collectors, who just gathered whatever was available in the forest. Obtaining their walnuts straight from the cooperative has enabled Vega Plus to discuss quality standards with its suppliers. The rising awareness on and commitment to quality requirements by the collectors, increased efficiency in the processing facility. It became possible to pay the collectors an incentive for high quality raw material without influencing the margin of the processor. Commercial discussions about quality and trade conditions triggered changes in the companies' quality policy and product grading. This resulted in a more diverse product portfolio, with different qualities for different commercial outlets. In addition, Vega Plus can jointly work with the collectors towards improvement of the forest sustainability and overall product quality. By increasing the price for high quality nuts the processor gives a financial incentive to the collectors to improve their forest management practices in order to increase their income.

Vega plus is investing in its processing facilities in order to meet the demands of the European retail. Realizing that the improvements needed are difficult to realize in the currently rented infrastructures, the company is willing to construct a new facility that meets the European demands. Both the direct

linkage to the collectors as well as European processing standards are new to Vega Plus. The project supports Vega Plus in the development of these activities with both regional knowledge and international knowledge provided by Intersnack.

Capacity development

As the direct trade set up is new to the Kyrgyz walnut sector, the project team not only provided training, but also engaged in coaching of the partners. Timely monitoring of the performance of the supply chain enables coaching throughout the season. This provides the opportunity to assess the results of the activities implemented within the framework of the project after completion. It also provides the opportunity to adjust any irregularities and provide additional assistance or mediation wherever it is necessary and appropriate.

Future Business Development

At present, the project activities funded by GIZ and ICCO Cooperation and performed by both the supply chain actors and the supporting project team resulted in commercial agreements throughout the supply chain. A significant share of the volumes collected by over 200 walnut collector families are destined for the European market, the trade partners aim to export 60 million tons of processed walnut kernels to Europe. The activities have been well noticed in the Kyrgyz sector where neighbouring companies are eager following the developments that Vega Plus makes, and forest users are keen to join the cooperative. A parallel project, supported by ICCO Cooperation, lead to the linkage of walnut producers in Northern Tajikistan to processor Oro Isfara for supply to Intersnack.

Literature

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