



**PROJECT «NETWORK FOR AGRICULTURE AND RURAL
DEVELOPMENT THINK-TAKS FOR COUNTRIES IN MEKONG SUB-
REGION (NARDT)»**



Regional research

Agricultural innovations review in Sub-Mekong region countries

Artichoke tea production alliance model in Lam Dong province

1. General information

Ngoc Duy Tea Co., Ltd. was established in 1990. This is the first enterprise in Vietnam to process the raw materials from artichokes (leaves, flowers, stems, roots) into tea bags by Nguyen Thi Loc - business owner, who is credited with giving birth to the artichoke bag tea industry in Vietnam.

Ngoc Duy is a small-scale private enterprise, a member of the Association of Young Entrepreneurs and Producers of Lam Dong Province. Basically, the form of operation of the company is to purchase farmers' artichokes, then take technical measures and apply science and technology to classify, produce, process and pack. The products of Ngoc Duy company have been sold widely in different distribution channels in Vietnam.

The company's operational objective is to exploit the strengths of the city of Da Lat in its valuable source of medicinal material, the artichoke tree, to provide the market with tea products of high value in terms of preventive, therapeutic and health benefits (according to the company's operating motto: quality is a competitive advantage). The artichoke tree (scientific name *Cynara Scholium's l.*) was introduced to Da Lat in the early twentieth century. Based on to the suitable climate and soil, the artichoke tree in Da Lat has been scientifically proven to be much better than any other region. However, products from the artichoke plant only reach a wide range of consumers when processed in the form of filtered tea or dissolved tea, meeting the need for quick, convenient, efficient use... It is for this reason, with the aim of bringing a precious pharmaceutical product to the consumer in a popular, lightweight, elegant way, Ms. Nguyen Thi Loc has established Ngoc Duy Co., Ltd. to this goal.

In addition to the main product, artichoke tea bags (accounting for 75% of total sales), in the process of development, Ngoc Duy Company also processes other tea products such as bitter gourd tea, Chamber bitter/leaf flower tea, Multiflorous Knotweed tea, *Crinum Lat folium* tea, etc. The raw materials for the production of the company's teas are all high-value medicinal plants grown and developed in Lam Dong province.

The company's main consumption market is the domestic market, accounting for 75 - 85% of total revenue. The company has set up more than 1,000 agents nationwide and consuming in many big cities and big supermarkets. The company's market share of artichoke tea bags currently accounts for about 30-35% of the domestic market share.

For the international market, the company's tea products have been exported to several countries such as France, Canada, Taiwan, Singapore, Laos, Cambodia...

2. Model development

Before establishing Ngoc Duy Company, Ms. Nguyen Thi Loc had nearly 20 years of experience working at Lam Dong Pharmaceutical Union Enterprise. During that period, the People's Committee of Lam Dong province required the enterprise to pay attention to the production of artichoke tea to promote the local strengths, widely supply to consumers and towards export. To carry out this task, Lam Dong Pharmaceutical Union Enterprise purchases fresh artichoke leaves to produce pills, artichoke flowers for export, while the stems and roots are not purchased due to bitter taste (farmers leave for cows or dried for cooking). Knowing that the composition of artichoke stems and roots is somehow the same of leaves and flowers, Mrs. Loc started thinking about making tea.

Farmers harvest artichoke in the field



Source: Health and Life Newspaper.

With this determination, Ms. Loc resigned from Lam Dong Pharmaceutical Union Enterprise and switched to tinkering and researching how to make artichoke tea bags. In 1990, after three months, Ms. Loc introduced to the market Da Lat artichoke tea bags branded Ngoc Duy.

The shaping of Ngoc Duy's artichoke tea brand has been demonstrated since 1990 through a process of hard work, investment, and effort by a collective of employees with a long-term commitment to the company. That is a chain of processes from surveying customer and market needs, accessing technology and investing in

technological innovations in accordance with localized materials, creating additional safety features. nutrition of the product and create the attraction of the product to consumers for the product.

At present, Artichoke Ngoc Duy brand can officially stand in the domestic and foreign markets by diversifying its products. Therefore, the company's products are favorable not only in domestic market but also international one including Canada, France, Taiwan, Singapore, or Japan. In addition, the company's products have also been diversified in other herbs such as bitter gourd, ginger, chamber bitter/leaf flower, multiflorous knotweed, or crinum Lat folium.

Since the invention of artichoke tea bags with raw materials including artichoke stems and roots, farmers can gain more income instead of feeding artichoke stems and roots to cows or dry them as firewood. Farmers have also been supported by Ngoc Duy company on providing seed and fertilizers and production output has sold to company.

Since 2010, Ngoc Duy Company has joined the Alliance for production of Artichoke Tea through the form of production association with farmer households, Lam Dong Department of Agriculture and Rural Development and the World Bank. This is a form of cooperation between farmers, businesses, research and management agencies and sponsoring agencies. This form helps farmers ensure their production output, solve difficulties in investment capital; helping the company to have a stable source of raw materials and closely monitor quality and technique (through the role of the Department of Agriculture and Rural Development). Basically, farmers are supported by the World Bank with 40% of production costs, then Ngoc Duy Company is the only unit with the right and responsibility to buy back all of the farmers' products. Farmers participating in this alliance include 45 artichoke growing households in wards No11 and No12 of Da Lat City. When building the Production Union, the households joined together to establish the model of the Artichoke Farmer's Cooperative Group.

Artichoke garden in Da Lat City



Source: Laboure Newspaper.

The goals of this Alliance are:

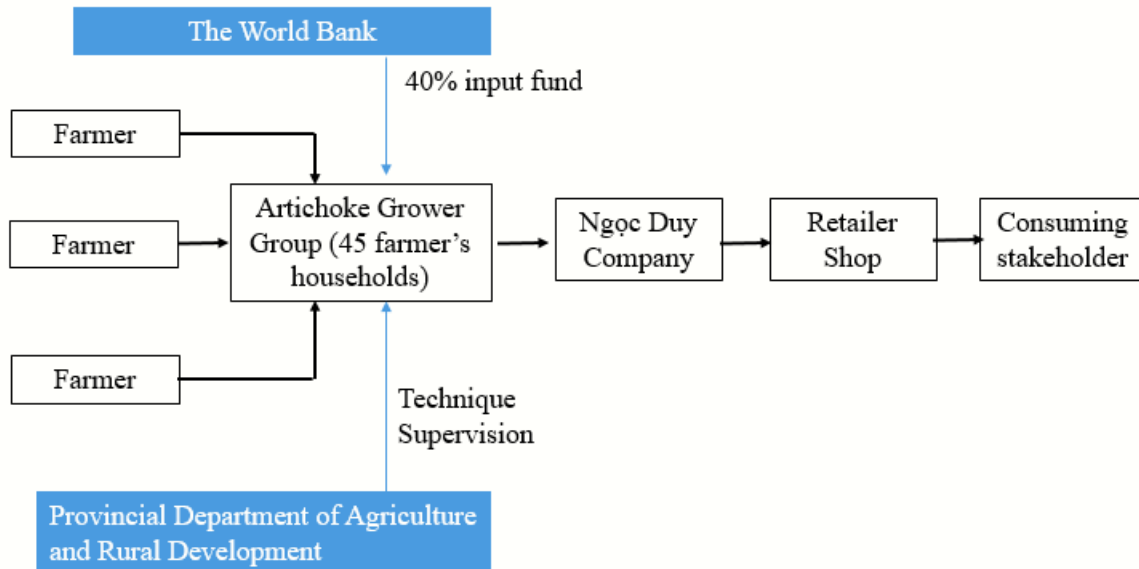
- Create an artichoke production model that is supervised from production to consumption based on a voluntary, long-term cooperation relationship between the company and the farmer's cooperative group.
- Produce high quality products thanks to the good application of technical processes based on VietGAP standards of farmers.
- Stabilize and expand the number of households growing artichokes.
- Raise income and create a stable life for farmers.
- Expand and develop the company's artichoke consumption market.

This Alliance model was established to solve the difficulties and limitations of both farmers and businesses. On the side of farmers: limited capital, lack of experience and new techniques in production, outdated farming practices and post-harvest handling, poor management skills, lack of product certification, poor quality artichokes, lack of market information, etc. meanwhile on the side of businesses: not yet self-sufficient in raw materials when developing the market on a large scale, the source of raw materials from farmers is not high quality, etc.

Through the Alliance model, farmers are the main beneficiaries, including: i) Support to invest in facilities (equipment, production materials), ii) Technical training to improve capacity, sustainable farming techniques, iii) training in production

according to VietGAP standards and post-harvest technology, ensuring selling price thanks to the contract with Ngoc Duy company.

Stakeholders in Alliance model for Artichoke Tea Production



Source: Ngoc Duy company.

Farmer households participating in the Artichoke Tea Production Alliance model are mainly small-scale producers. The total area of 45 farmer households participating in the model is 9 ha (average 0.2 ha/household). Although the number of households and production scale is not large, it has shown the potential for replication of the model. The important point of the model is the linkage between farmers to implement the common production technical process, providing uniform and quality products, and the direct cooperation between farmers' organizations and businesses. Industry associated with the technical and management support role of the management agency (DARD) has helped this link be implemented closely, not broken due to subjective factors (farmers sell products to other units or businesses do not buy products from contracted farmers) or objective factors (market, weather, risks in production and business...).

3. Opportunities and challenges

The model of association between cooperatives and companies has the opportunity to expand in the future in line with the development orientation of commercial, especially with medicinal plants in remote areas. Through this linkage, farmers and businesses can take advantage of each other as well as fill gaps for sustainable development. This model can be extended and applied to other plants and animals.

However, this linkage model also has certain challenges. Increased consumer demand along with the appearance of many other artichoke brands (unknown ingredients, mixed with other ingredients) of small production facilities are competing strongly with tea products. Artichoke Ngoc Duy. In addition, the association requires financial and technical potentials of businesses as well as farmers' awareness in compliance with production processes and commitments in contracts. This is often violated when there are fluctuations in production and business, especially the price of raw materials in the market.

4. Conclusion

The partnership model to support farmers to develop production under the Artichoke Production Alliance of Ngoc Duy Company will continue to be replicated to meet the increasing demand for production materials. This model has achieved remarkable results in recent years thanks to the close cooperation between three parties: farmers - businesses - management agencies. This is a form of cooperation that is being encouraged by the Government of Vietnam but has not been successful due to many reasons. The results obtained from the Alliance model of artichoke tea production can also be applied to other agricultural commodities. The support of management agencies has enabled farmers and businesses to utilise the partnership stronger but not so loose as usual. The business is maintained and implemented in a stable and long-term manner, bringing practical benefits between the two parties.