



Netherlands Enterprise Agency



# Food Security

*Learnings from public-private partnerships supported by the Facility for Sustainable Entrepreneurship and Food Security (FDOV)*

*>> Sustainable. Agricultural. Innovative.  
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## FDOV results



Food security exists when all people have stable access to sufficient, safe and nutritious food. By supporting public-private partnerships (PPPs), FDOV aims to make a sustainable contribution to improved food security. FDOV subsidies leverage private investments and entrepreneurship to increase the availability of nutritious food and improve food access and diets. But how does this work in practice? What can we learn from these partnerships?

### PPPs to increase food availability

In many parts of the world, there is a constant shortage of nutritious food to meet people's dietary needs. This applies to the availability of calories, but even more to vitamins and minerals. Due to the low availability of nutritious food, many households cannot afford healthy diets.

FDOV contributes to the better availability of cereals, potatoes, vegetables, fruits, fish, dairy, nuts, eggs, and meat. Many FDOV projects focus on training farmers in good agricultural practices and access to markets, resulting in improved access to high-quality farm inputs, such as improved seed varieties and market linkages.

Commercial objectives of agri-food companies and Small to Medium Enterprises (SMEs) may be well-aligned to improve food availability. A PPP can leverage the reach of these private actors through public funding and collaborations with knowledge institutes and development organisations. Companies bring in specific knowledge and market linkages and can help ensure commercially sustainable results. Public funding and involvement of development organisations enable to reach more farmers and act beyond the original scope of the agri-food companies.

The FDOV project **Seeds of Expertise for the Vegetable Industry of Africa** is a good example of how PPPs can facilitate successful collaborations that contribute to improved food availability. The supported PPP, with Dutch vegetable breeding companies East-West and Rijk Zwaan, introduced 30 improved varieties of vegetable seeds in Tanzania. These seeds have been tested and adapted to local conditions to ensure high vegetable yields. Adopting these seeds directly contributes to the increased availability of vegetables.

But, the activities of the partnership did not stop here. To promote the uptake of improved seeds and good agricultural practices, the project educated farmers by

- producing technical handbooks, pamphlets, and videos,
- training 1,435 lead farmers, and
- establishing more than 1,000 demonstration fields.

This resulted in more than 48,000 farmers assisted with improved seeds and advice on vegetable production, storage, and market linkages.

*“[With the support from FDOV and] through local partnerships, we could reach and train many more farmers than we could have reached on our own.”*

– Heleen Bos (Rijk Zwaan)

The farmers benefit from better access to high-quality vegetable seeds and improved production practices. This makes vegetable cultivation more productive and attractive, contributing to the higher availability of good quality vegetables. In turn, the seed companies are benefitting through increased local demand for their improved vegetable seeds. Now that FDOV funding has ended, these seed companies remain active in the country and are following up on the project activities.

### Improving the food system

For food security impact, it is important that the food produced by the projects addresses a nutritional deficiency, becomes available for food-insecure consumers, and responds to consumer demand. A food systems approach helps understand the nature of the prevailing food shortages and address the factors constraining improved food availability.

With the help of FDOV, the PPP **FoodTechAfrica** demonstrated how they analysed the Kenyan aquaculture sector and provided an integrated solution for the shortage of fish in the country. Tilapia and other fish, historically available through wild catch, had become virtually unavailable in the Kenyan food markets. Over the past decades, wild catching from Lake Victoria has dwindled due to overfishing and pollution. The aquaculture sector did not contribute much to fish availability due to insufficient know-how and low availability of fish feed and fingerlings.

As a solution, FoodTechAfrica established an entire aquaculture supply chain. This included the first fish-feed factory, a fingerling hatchery, a fish farm, and Aquaculture Academy. This academy provides farmers and other stakeholders with practical skills to

farm fish. As a result, farmers can now access training resources, technical assistance and essential inputs, such as fish feeds and fingerlings. Private-sector partners in this PPP would not have managed to make this systems-level investment without FDOV's support.

The project is widely considered a success and has led to an increase in fish production of nearly 4 million kilogrammes per year. This is the result of high-quality fish feed, fingerlings and know-how for fish farmers and establishing a large fish farm. With key inputs now available and a business case for aquaculture investments, more companies are becoming active across the sector. For example, 2 new investments in fish feed production have recently been announced. FoodTechAfrica thus kicked off a ripple effect on food availability beyond the scale and timeframe of the initial FDOV project.

One of the success factors is the project's in-depth food system studies. These were the basis for critical decisions on where and how to produce, what to produce, and for whom. Experimenting with different fish varieties led to a choice for tilapia instead of the earlier-considered variety catfish, for which trials showed less market demand. To ensure affordability in the different market segments, the project marketed different fish sizes. The smallest fish, known as 'kidogo', is targeted at the poorest markets to ensure affordability for low-income consumers. Most of the fish are sold within 50 kilometres from the production location as a result of high local demand.

### Cash crops and food security

FDOV also supports PPPs with private sector development and income-generating objectives. Typically, these focus on export cash crops, such as coffee, cocoa, and nuts. These projects do not intend to contribute directly to improved local food availability, but they do contribute to improved food security indirectly.



### FDOV's dual objective

FDOV has the dual objective of contributing to 'private sector development' and 'food security.' Projects may contribute directly to better food availability among farmer households and local markets. Projects may also contribute to jobs and income-earning opportunities, providing households with the financial means to access nutritious food.

They may, for example, contribute to food security by improving the employment opportunities and income (stability) of food-insecure households. Another way PPPs with a cash crop focus can contribute to food access stability is by promoting food production next to the promoted cash crop. A key lesson from FDOV projects pursuing this strategy is the strong synergy between cash and food crop production.

The **Macadamia Value Chain Enhancement project** in Malawi demonstrates this. The PPP promotes and enables the cultivation of macadamia nuts for the export market. It provides farmers with macadamia seedlings and agronomic training and is expanding macadamia buying, storage, and processing facilities. A difficulty for the project is that macadamia trees only yield nuts after 5 years. The PPP also provides training on vegetable intercropping (beans) and nutrition education to convince farmers to invest in macadamia trees. Selling vegetables gives farmers an additional source of income until they can complement their income with macadamia sales. Meanwhile, farm households also benefit from better access to vegetables and better knowledge of the nutritional benefits of consuming these vegetables themselves rather than selling them.

### Nutrition education for better diets

Agri-food companies generally recognise their role in improving food availability and access. But many companies consider helping households make better dietary choices outside their sphere of influence and beyond their commercial interests. However, some FDOV projects show how working towards more nutritious diets can further strengthen the business case of the companies involved in the PPP.

The **Vegetable for All project in Tanzania**, for example, combines activities to improve farmer access to hybrid seeds with an 'eat vegetables' campaign. This campaign promotes dietary diversity and emphasises the importance of vegetables in healthy diets. The campaign takes place in local markets and schools in communities where the project also assists farmers. As a result, farmers and consumers can make better-informed decisions on what food to sell and consume. More households choose to eat vegetables, increasing the demand for vegetables and, in turn, for vegetable seeds. A win-win situation for beneficiaries and companies. Nutrition education campaigns can thus improve diets *and* increase the demand for nutritious foods and farm inputs brought forward by the farmers and companies in the PPPs.

## Conclusion

FDOV has demonstrated that PPPs can effectively contribute to food security. The PPPs supported by FDOV illustrate how to align the objectives of public and private partners with those of development organisations in improving food availability, more stable food access, and contributing to better diets. Once the objectives are aligned, a PPP can leverage all partners' combined expertise, networks, and financial investments to improve food security, which would not have been possible without the partnership.

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