



FDOV over the Decade

A decade of lessons-learned the Facility for Sustainable Entrepreneurship and Food Security (FDOV) programme

Netherlands Enterprise Agency (RVO), 2023

Abbreviations

BoP	Bottom of the Pyramid
CSR	Corporate Social Responsibility
FDOV	Facility for Sustainable Entrepreneurship and Food Security
FDW	Sustainable Water Fund
FNS	Food and nutrition security
GAP	Good Agricultural Practices
MOP	Middle of Pyramid
PPP	Public-Private Partnership
PSD	Private Sector Development
RVO	Netherlands Enterprise Agency
SDG	Sustainable Development Goal
SME	Small-Medium Enterprise

Executive Summary

A decade of the Facility for Sustainable Entrepreneurship and Food Security (FDOV) programme has contributed to food security and private sector development in developing economies, in particular by supporting the scaling-up of agricultural subsectors. With a wealth of accumulated knowledge and experiences, 35 FDOV projects were analysed to reflect on general challenges, successes and lessons learned from the perspective of the Netherlands Enterprise Agency (RVO).

The FDOV portfolio allocated subsidies to an array of Public-Private Partnership (PPP) projects, where there was a general focus on improving the business environment, as well as promoting food availability and accessibility through increased food production. Business models varied, including enhancing local agricultural production methods, introducing new varieties, building capacity, and enriching the quality of products. The PPP model of the FDOV programme was found to foster the exchange of expertise and skills between partners, where flexibility, good communication, clear allocation of roles and responsibilities, and the inclusion of local partners and (a) strong private partner(s) underpinned the success of partnerships and the acceleration of project interventions.

In effect, the FDOV programme helped accelerate certain activities, scaling and offset financial risks. As a whole, the FDOV programme has increased dietary diversity (2,202,595 people), increased food production (543,820 people), created jobs (76,869 people), increased income and job conditions (448,071 people) and trained 713,003 individuals¹. In addition to this, the programme has contributed to the development of 628 local Small Medium Enterprises (SME's) and/or start-up's, as well as 80 local companies and 82 Dutch companies active in the target countries. Overall, a decade of FDOV has allowed for greater funding, allocation of resources and network, which in turn has accelerated scaling in relation to Sustainable Development Goal (SDG) 2, SDG 8 and SDG 17.

¹ [Netherlands Enterprise Agency \(RVO\), Infographic FDOV \(rvo.nl\), 2023](#)

Purpose of report

The Facility for Sustainable Entrepreneurship and Food Security (FDOV) by the Dutch Ministry of Foreign Affairs supported public-private partnerships (PPPs) in the field of food security and private sector development. The Dutch government introduced the concept of PPPs in the early 2000s, which was understood as a collaborative arrangement in which risks, responsibilities, resources and competencies are shared to achieve a common objective. With this PPP approach and together with other donors, the Netherlands government aimed to unlock the trillions needed each year to achieve the Sustainable Development Goals (SDGs), catalysing innovation and private investments². The FDOV is a programme for public-private partnerships, where collaboration was qualified as a PPP if there was at least one public partner, one private partner, and one non-governmental organisation (NGO) or knowledge institute. Furthermore, at least one of these partners had to be legally registered in the Netherlands and at least one partner needed to be legally based in the country where the activities were to be implemented.

The programme centred around food security and the private sector, with the aim to positively contribute towards achieving SDG 2, SDG 8 and SDG 17. It aligned to the private sector objectives³ as described in the 2011 policy letter and the food security objectives⁴ of the 2014 policy letter. More specifically, the programme aimed to contribute towards the following four areas:

1. Enhancing agricultural production and productivity. This domain focused on agricultural development and covered food security policy objectives in particular (1) enhancing agricultural production/productivity; (2) making markets work; (3) improving the business climate and (4) achieving ecologically sustainable food systems. Underlying intervention strategies included (a) promoting good agricultural practices and resource management, (b) introduction of improved varieties, (c) promotion of specific services/inputs and (d) support entering the market.
2. Establishing viable agri-food value chains and related business cases. This domain focused on technical and financial sector development, knowledge and information, and market development which contribute towards stimulating (inclusive) businesses with the possibility of positively impacting low-income groups and stimulating women-entrepreneurship.
3. Improving food security and nutrition (FNS). This domain focused on a) eradicating hunger and malnutrition and b) promoting inclusive growth of agricultural sectors. This also included accessibility, in terms of improving local and/or regional availability to diverse and nutritious foods.
4. Promote PPP approaches. This domain focused on mobilizing the commitment of private sector actors and fostering the (enabling) role of the public sector and other actors for structural changes in the agri-food sector.

Finally, the FDOV programme required that cross-cutting issues such as gender, climate change, good governance and the environment were also addressed.

With two tenders in 2012 and 2014⁵, the FDOV programme was implemented by the Netherlands Enterprise Agency (RVO). As of 2022, RVO has implemented 35 FDOV projects in 9 sectors and in 24 countries (15 in Africa, 6 in Asia, 2 in South America and 1 in Europe). The FDOV portfolio covered an array of crops of which 13 on fruits & vegetables, 8 on animal proteins, 3 on potatoes, 3 on cereals, 4 on nuts, 4 on luxury commodities (e.g.,

² [BoP, MDF & RVO., Inclusive PPP's, 2018, & 20140807 Final FDOV policy English version \(rvo.nl\)](#)

³ (1) law and regulation; (2) infrastructural development; (3) financial sector development; (4) knowledge and information; and (5) market access and market development.

⁴ (1) eradicating hunger and malnutrition; (2) promoting inclusive growth of agricultural sectors (focus on lower income groups and women); and (3) achieving ecologically sustainable food systems

⁵ [20140807 Final FDOV policy English version \(rvo.nl\)](#)

coffee & cocoa), 3 on other commodities (e.g., patchouli, cotton and sugarcane) and the final 3 on other areas (e.g., soil testing, crop/health insurances and health clinics)⁶. The programme has contributed towards increasing dietary diversity (2,202,595 people), increasing food production (543,820 people), creating jobs (76,869 people), increasing income and job conditions (448,071 people) and training 713,003 individuals⁷. In addition to this, the FDOV programme has contributed to the development of 628 local SME's and/or start-up's, 80 local companies and 82 Dutch companies active in the target countries. These are only a few of the many results the FDOV programme has achieved so far. The reader is encouraged to read more about FDOV's quantitative results in RVO's [infographic](#) or the FDOV [website](#).

Alongside these results, there is a wealth of accumulated experiences and knowledge to be reflected on. After a decade since the first call of the FDOV programme, this report takes a closer look at the overarching challenges, successes and lessons learned⁸ from 35 FDOV projects. As each project was unique, this report attempts to capture main insights and commonalities across the projects that contributed towards enhancing agricultural production, viable agri-food value chains, food security and PPPs. Data was collected using internal documents (e.g., project proposals and project reporting) as well as a desk review of related external documents (e.g., PPPLab, KIT and other initiatives). Hence, it should be understood that this report is not a scientific report nor an evaluation of the FDOV projects. Neither does the report include a detailed analysis of all 35 projects nor does the rapport analyse the extent to which the policy objectives have been met through the projects. Rather, this report is a general analysis of the FDOV programme from the perspective of RVO and acts as a point of reflection to observe the successes of the FDOV programme so far. Furthermore, it should be mentioned that some projects are mentioned as an example, whereby a particular aspect of the project is showcased. It should be understood that that one aspect is in no way indicative of the project in its entirety, but rather illustrates a learning aspect. Finally, it should be understood that in order to maintain a clear structure, only a few examples are illustrated in this report. Should the reader prefer to read each project in its entirety, the reader is kindly referred to the [RVO project database](#) where all FDOV projects are illustrated.

⁶ [Netherlands Enterprise Agency, Infographic FDOV \(rvo.nl\), 2023](#)

⁷ [ibid](#)

⁸ Lessons-learned here are defined as the knowledge or understanding gained after an experience or particular course of action

Enhancing agricultural production and productivity

Improving agricultural productivity and increasing production formed the basis of many FDOV projects. It followed the logic that an increase of agricultural production can either directly contribute to increased availability of (diverse) food at household and/or local level, or more indirectly through an increased income among (small-scale) producers and the development of the sector. The logic is essentially twofold, namely: (1) increased agricultural production leads to enhanced (local) food **availability** and **affordability**, based on the idea of a stagnating domestic food production system and underutilized agricultural lands; and (2) increased agricultural production raises incomes and provides employment, which improves the **accessibility** of food and purchasing power⁹.

The FDOV projects had impact pathways which focused on (1) improved sourcing (i.e., improving farmers' production and processing of certain commodities), (2) improving the provision of a service, input or technology to improve conditions and methods of production, and finally, (3) improving food products themselves (i.e., producing, marketing and selling improved or enriched food products)¹⁰. The FDOV portfolio showcased that via public-private partnerships, expertise can be exchanged and collaboration can result in the enhancement of agricultural productivity and profitability in certain sectors. The success of these projects was attributed to several factors, including, but not limited to, tailoring to the local market, introducing better varieties and building capacity. These factors and their respective lessons are briefly outlined below.



⁹ [Royal Tropical Institute \(KIT\), Mid-Term Review of the FDOV, 2016](#)

¹⁰ *ibid*

Introducing improved varieties and/or production for local/national markets

Several projects focused on enhancing agricultural production techniques and introducing improved varieties which positively contributed to higher yields, improved production, and income diversification. On the one hand this included introducing new crops or introducing **high-quality seeds** which helped to increase production, open up new markets, ensure more nutritious vegetables and grant higher resilience to climate variability. Interestingly, the [Seeds of Expertise for the Vegetable Industry of Africa \(SEVIA\) project in Tanzania \(FDOV12TZ01\)](#) reported that their high engagement of the target group was also attributed to **farmers being interested in the seed variety first**, irrespective of the technology and/or technique on display. Farmers believed the variety contributed to the success or failure of its germination and/or growth.

Results were especially positive when projects took a **value chain approach with a strong business case**, in terms of the project working on improving not only agricultural practices, but also being involved in the production, storage, processing and retail stages. This was particularly the case among FDOV projects which focused on potato production. Furthermore, when introducing new varieties or crops, it was found to be important to make **effort to select varieties that linked well with the processing market, the socioeconomic context and climate**. For example, the [Potato processing project in Ethiopia \(FDOV14ET06\)](#) deliberately chose potato varieties that were more robust and matched the need of smallholder farmers. Another example is the [Seeds of Expertise for the Vegetable Industry of Africa \(SEVIA\) project in Tanzania \(FDOV12TZ01\)](#), which focused on local varieties. An observed benefit was that this reduced entry barriers for small farmers with limited investment capacity, which in turn also improved the potential of inclusiveness of smallholders¹¹. There is thus value in introducing varieties that meet not only demand, but also the capacity of producers and climatological context. Moreover, it is valuable to **demonstrate the value of the new varieties and/or techniques to the target group**, with the use of trainings, demo-plots, cooking demonstrations and so forth.

Yet, it goes without saying that it is a challenging endeavour to introduce new varieties. The FDOV portfolio displayed that innovation, including introducing improved varieties and/or services, **requires considerable time for piloting, pre-testing, and adjusting** to make sure it is in line with the local context. It also requires navigating potential **risks** and often requires **higher pre-investments** than initially expected. Within the FDOV portfolio, projects struggled to find sufficient time to pilot, highlighting the importance to dedicate time and budget for this. Time was also needed to register new varieties and navigate bureaucratic hurdles. National legislation defines the boundaries for the registration of new varieties and should be carefully considered in terms of what is feasible for a project that wants to register new varieties. The FDOV portfolio showcased that **expertise** from private partners can **provide support in the introduction and registration** of new varieties of crops. In addition to this, it was observed that the **adaptive approach** of the FDOV programme was helpful in this regard. Projects could submit requests for change(s), majority of which were accepted. Though changes in the partnerships had to be approved on their compatibility with the original partnership objectives which served to safeguard contractually committed objectives, the possibility to adjust was appreciated by project partners. Another appreciation was the **close involvement of RVO**. Tasked to manage the FDOV portfolio on a day-to-day basis by implementing reporting and monitoring requirements, visiting each project on an annual basis, and having regular communication between the lead project partner and project advisors, a close collaboration ensued between RVO and the FDOV projects which allowed for greater understanding and discussions.

¹¹ [BoP, MDF & RVO, Inclusive PPP's, 2018](#).

Investing in capacity building

Training targeted groups was an invaluable component of the FDOV portfolio. Not only is it important to **disseminate** the necessary information and ensure the desired quality production, but it also has a **commercial motive to sustain capacity-building activities beyond the duration of the project**. Training is considered **pre-competitive** for most private partners. By improving the knowledge of agricultural practices, this has a higher guarantee that the beneficiaries meet the desired quality standards, thereby increasing market opportunities for both private partners and beneficiaries. This was, for example, shown by [SEVIA project in Tanzania](#) (FDOV12TZ01), where capacity building was part of the private partners' business model and presented a commercial motive for the long-term continuation of capacity-building activities in ensuring quality production. At the same time, capacity building requires not only substantial up-front investments at farmer level but also time and expertise. As an example, the [Food Tech Africa](#) (FDOV12KE03) project found that the amount of practical training needed was greater than anticipated at the start of the project. Getting trainees up to the required technical level required more effort, especially regarding training people on the more complicated business and management aspects of fish farming.

Encompassing all the lessons-learned from the 35 projects, there is value in disseminating knowledge by:

- **Ensuring for the embeddedness in curricula:** Active involvement of (national) research institutes and public actors (i.e., local government) in many cases turned out to be beneficial for evidence-based content, outreach, scaling, and sustainability. Tailored curricula, knowledge transfer methods and materials as developed by projects, could contribute to public or other private sector led vocational training initiatives. This has the potential to contribute to scaling and sustainability.
- **Having easy and quick access to technical support.** Training farmers has been shown to be more effective when it is **tangible, visual and at a technical level that suits the farmers' expertise**. For example, materials (e.g., training manuals) using clear and context specific pictures, written in the local language and directly available to farmers themselves was shown to generate more engagement from the target group. Another example is the use of demonstration plots, kitchen gardens or other evidence-based learning techniques which make it easier to learn new techniques, because 'seeing is believing'. A final example is the use of simple social media platforms to facilitate communication and assistance on issues (e.g., crop management, pests/diseases and ask advice from experts), such as WhatsApp. Hence, a lesson learned here is to focus on developing simplified manuals and other training materials rather than on using high-level monographs.
- **Engaging with structures of farmers to exchange information.** Working with farm cooperatives or structures is beneficial in reaching larger groups, allow knowledge exchange between farmers' themselves as well as increase their ability to respond to a market need(s) for the export of their produce. Furthermore, there is **commercial value of engaging with farmer structures**. Farmers who have joined forces are regarded as an interesting group for large agricultural companies and governments. This is because collectivized farmers are regarded as a viable network for producing their export products, have more accountability and are easier to reach than individual farmers. Furthermore, it is easier to establish contract farming arrangements with (direct) links to the market with farmer groups. As such, organized associations provide the opportunity to strengthen the competition and coordination between the exporters and producers, reduce the production and transaction costs in the supply chain and attract financial intermediation for long-term capital investment(s).

For a more in-depth review on capacity development within the FDOV programme and other PPP instruments, the reader is invited to read the recently published [Capacity Development in Public-Private Partnerships Lessons Learnt from NL Funded Projects report](#)¹².

Ensuring environmental sustainability

Projects largely focused on increased production and productivity but were often affected by extreme weather conditions such as prolonged drought as well as variable precipitation and floodings. As a consequence of climate change, enhancing agricultural production does not come without considering how to mitigate or adapt to the changing climate conditions. There is an increasing need for **more attention on climate mitigative and adaptive approaches** in projects. Examples include water saving, harvesting and storage mechanisms as well as drought resistant (local) varieties. In addition, more agro-ecological approaches, including mulching, intercropping, increasing biodiversity and agroforestry, seem to have potential in the future. Attention for the management of climate impacts was part of the selection criteria for FDOV projects, which are outlined as follows.

Within the portfolio, one project took a mitigative approach through **entomophagy**, namely cricket rearing. Entomophagy **requires a fraction of the natural resources** than for regular livestock, providing an ideal alternative nutritious and protein source. The [Flying Food project](#) (FDOV12KE09) project focused on crickets as an agricultural product that had environmentally sustainable foundations aimed towards mitigating climate change. The project aimed to establish commercial rearing of crickets for human consumption. Though the project faced challenges, the project had generated a wealth of knowledge and keen interest in the concept of rearing insects, both for food and feed among SME's and farmers. Efforts and interventions continue to this day, which can be further read [here](#).

Numerous FDOV projects took a more climate adaptative approach. Some did so by introducing high-quality seeds or **hybrid seeds** to not only improve production but also **increase resilience to diseases and climate stress**, ideal for regions with variable climates. Some projects **introduced intercropping** which **reduced the reliance on a single crop** and **provided alternative sources of income**. Other benefits included providing shading, preventing soil erosion, and reducing water evaporation which stimulated resilience towards drought. The [Macadamia Value Chain Enhancement project in Malawi](#) (FDOV14MW16) project also, interestingly, showed that intercropping can generate a **commensalism relationship**, where one species benefits from the relationship and the other species is neither harmed nor helped. The project intercropped with beans, and these nitrogen fixating beans functioned as an organic fertilizer. Learning from these projects, it is shown that intercropping reduces the reliance on a single crop which deters high vulnerability towards climate impacts, price fluctuations or other unforeseen circumstances by essentially having a back-up. Furthermore, intercropping can act as a (temporary) **safety net** as some crops required a lot of time to grow until they were viable for export and/or sale, leaving smallholders without produce and income for periods of

¹² [Hawkins, R. & van Rij, C. Capacity Development in Public-Private Partnerships, 2023](#)

time. The diversification of crops at farmer level seems to be a good strategy by offering an alternative source of income and nutrition.



Finally, some projects operated in contexts which faced water shortages and consequently focused on **irrigation schemes**. This added value to crop production in arid regions, **supplemented soil moisture**, and **increased resilience**. This solution had especially worked for projects focusing on vegetable and/or bean production due to the fact that this type of production is typically concentrated on smaller plots, enabling simple irrigation, drainage, and protection methods. A lesson learned here is that efficient water management should be considered by all projects. Alongside irrigation, there are other water management techniques to consider such as water saving, harvesting and storage mechanisms as well as drought resistant varieties. The [Sustainable Water Fund](#) (FDW) has a specific theme of projects addressing efficient water use in agriculture and provides insights how projects can integrative good water practices.

Establishing viable agri-food value chains and related business cases

Establishing viable agri-food value chains and related business cases was another core aspect of the FDOV programme. Food security and private sector development were closely intertwined in the programme, where not only was it necessary to enhance agricultural production but also to sustain a business case to ensure the continuation of its activities. The PPP approach was key for the financial sustainability and scalability of projects, adhering to FDOV's ambition to contribute towards 'scaling.' At the heart of it, most projects used a combination of establishing, improving, or expanding the market for the service, input, or technology of the involved firms¹³, alongside enhancing agricultural production.

Upscaling and improving processing

Numerous FDOV projects were successful in procuring the necessary equipment and/or hardware to facilitate processing and storage facilities. Across the FDOV portfolio, farmers observed the added value of processing in terms of acquiring higher prices, tapping into the market, longer shelf-lives, as well as job creation at the processing facilities or with transportation. Another added benefit was that processing allowed for **diversified production**. This was illustrated by, for example, the [Malawi Groundnut project Going Nuts](#) (FDOV12MW01), which successfully produced peanuts in different qualities, oil, peanut butter, 'blanched groundnuts' and 'groundnut cake', oriented for different markets. As peanut oil does not contain Aflatoxin, peanuts with too high a level of Aflatoxin could be used for oil and the residual product ('groundnut cake' or 'press cake'), was then used as a **by-product** in livestock production. The processing of one crop into various products can thus create potential for creating more market potential, increasing diversified products and allowing for less food waste.

Success factors for upscaling production from the 35 projects included:

- Taking a **value chain approach with a strong business case**, meaning that the project looked at linking smallholders to the market and considered production, storage, processing, and retail.
- **Providing the necessary training to maintain and manage the facilities**, as well as showing the added benefit of using the hardware to improve production showed long-term benefits for the maintenance of the facilities as well as facilitating job creation.
- **Providing time for the gradual adoption of widescale mechanization** among beneficiaries. On average, it took time for beneficiaries to accept new processing as well as in some cases being financially capable to contribute to the processing.
- **Involving and having the commitment from local parties**, given their context knowledge, and long-term perspectives. This can provide capacity to cover additional time, resources and/or investment needed on the long run.
- **Tailoring to local circumstances and consumer demand**. A market analysis and understanding of *what* makes a viable agri-food business case in that particular context was imperative and done by the majority of FDOV projects. However, a market can change, and assumptions may have to be reassessed. For example, the [FoodTechAfrica fish project in Kenya](#) (FDOV12KE03) found that building a fish processing plant was not necessary. The original idea to establish a central fish processing company was scaled down to basic processing to adapt to the local market needs, as it turned out that consumers preferred fresh fish. It is also interesting to note that lessons learnt were consciously built upon and as a direct spin-off of the [FoodTechAfrica](#) (FDOV12KE03) project, the [FeedTechKenya](#)

¹³ [Royal Tropical Institute \(KIT\), Mid-Term Review of the FDOV, 2016](#)

impact cluster was successfully launched to further grow the local fish feed production. Another example includes the [She sells Shea project in Burkina Faso and Mali](#) (FDOV14BFo26), which at local level found more potential in marketing moringa powder than initially expected. Here the lesson learned is to often reflect and assess if and what kind of processing is needed. A final example includes the [SMASH project](#) (FDO12RWo4) found that there was more demand for low- and mid-tech greenhouses (rather than the high-tech greenhouses) than was initially assumed, and found more interest in its other packages. Currently, its spin-off [Holland Greentech](#) social enterprise continues to provide a complete package for horticulture and potato cultivation in Rwanda with soil analyses, starting materials, technology and training.

Access to certification

Numerous FDOV projects worked towards achieving certification which met (local) standards of food safety, workers welfare, environmental practices, crop management and/or chemical usage. The added value of obtaining certification was to **gain access to local and/or global markets and retailers** and **reduce exposure to food safety risk(s)**. The FDOV projects showed that it is imperative to invest in training to ensure that farmers meet the desired standards. For example, the [Every Bean has its Black](#) (FDOV14GT03) project learned that adhering to specific standards required a lot of attention for technical assistance to producers and timely processing capacity. Another example is the [Food for All project in Kenya](#) (FDOV14KE63), which worked to achieve both a local certificate (Kenya GAP) as well as an international certificate (ORGANIC and Global GAP) to ensure food safety and quality to consumers. The project implemented **extensive training and monitoring** of its involved farmers, who needed to be able and willing to comply with all instructions and requirements. An interesting observation from the farmers was when the requirements for the certification did not directly link to the accessing markets and better prices, farmers were not as motivated and/or able to apply the respective requirement. A lesson drawn here is the importance of investing not only time and training, but also raising awareness and educating beneficiaries on the (long-term) value of the certification.



Another lesson drawn is assessing which certification is most suitable for the context. As an example, the [FoodTechAfrica fish project in Kenya](#) (FDOV12KE03) project, which focused on fresh fish for local markets, found that an expensive certification (i.e., Aquaculture Certification (ASC)) was not needed. Instead, the project qualified for the African Organisation for Standardisation (ARSO) certificate as their Recirculating Aquaculture Systems (RAS) technology allowed the system to be free from antibiotics and other medicines and/or chemicals. As a result, the fish farm achieved the ARSO certification which was more adapted to the local situation, ensured that the implementation of health and safety standards, improved employment conditions and guaranteed a quality product. Read more about FoodTechAfrica's journey with the ARSO certification [here](#).

A general challenge with certification is that it **does not protect against fluctuation in prices** on the international markets, as experienced by the [Access to Sustainable Markets and Food Security for Nicaragua's Coffee and Cocoa producers](#) project (FDOV12NI01). In line with this, **certification does not protect against changing requirements and standards**. A retailer may request one certificate one year and then change the next, highlighting the power of retailers (e.g., supermarkets). To comply, producers and private companies have to invest a lot in meeting requirements, trainings, and processing, and may not always be able to keep up with changing each season or year. These challenges should be considered when applying for certification and a closer look at the cost-benefit of certification (e.g., new markets, better prices, more sustainable production, alternative certification schemes) can be helpful.

Access to finance

Establishing viable agri-food value chains and related business cases requires significant investment and finance, not only for those directly involved in the project but the producers themselves. Access to finance

opens possibilities for entrepreneurship and opportunities for the poorer segments of the targeted community. The poorer segments of targeted communities are often excluded from accessible finance, as the absence of collateral to guarantee a loan and the lack of confidence in their ability to repay makes this target group regarded as too 'risky' to be considered for traditional financing instruments. Consequently, contributing to access to finance requires resolute and often creative efforts.

Access to tailored financial services is important for all types of farmers. The development of these services **requires profound contextual knowledge, understanding how to operate within the legal boundaries and time to tailor the services.** Experience has shown that generating access to finance directly from the



project itself often goes beyond the ability and scope of a single project. Most projects recognized that access to finance is essential and have included interventions to strengthen access to finance for the beneficiaries, though the funds itself were kept outside the project boundary. As FDOV projects could not directly provide loans or grants to farmers due to it not being a donor or grant organization, instead projects **made use of existing mechanisms** (e.g., engaging banks for loans) and linked farmers to financial institutions to assist them. For example, the [Seeds of Expertise for the Vegetable Industry of Africa \(SEVIA\)](#) (FDOV_{12TZ01}) linked farmers to financial institutions (i.e., NMB (loans) and EFTA (equipment loans)) to assist beneficiaries. The project did so by inviting financial institutions who could provide loans to farmers on field days. A lesson drawn was that farmers wanted to know the source of funds for improving their productivity and/or production and were keen to find out who supplies such facilities. Hence, projects can help ease this connection. At the same time, a key insight across the FDOV portfolio was to **start as early as possible to make the connection with the financial world**, both at a farmer level as well as an institutional level. Farmers may not completely understand the rules of a financial institution and vice versa, financial institutions may not fully understand the agricultural sector. Effort is thus necessary from the project to **align interests and make both parties aware.**

To add to this, the 2018 study on [Inclusive PPP's](#)¹⁴ from the FDW and FDOV portfolio identified a range of creative practices to mitigate the risks of lending to poorer target groups so that access to finance could be made more inclusive. A summary of these practices is presented below:

- **Group loans (in combination with savings to reduce depend)**, whereby the group has a collective responsibility to meet the conditions of the loan. In this way, the lender relies on the financial strength of the group rather than an individual, while social pressure within the group helps to ensure the individual compliance of each of the group members. This was beneficial to private partners as it reduced risks but instead shifted the risk to cooperatives, which from the latter's perspective was a disadvantage.
- **Making loans conditional upon the involvement in the project.** Examples from the FDOV portfolio which did precisely this include the [Cracking the Nut project in Benin and Burkina Faso](#) (FDOV14BJ54) project in Benin and [Sustainable Maize production project in Northern Ghana](#) (FDOV12GH01). By complying with these conditions (e.g., participation in training, or procuring a particular type of input or product) that are deemed to be conditional for the success of the project, targeted individuals can gain access to finance without having to offer collateral.
- **Adaptation of loan** duration and grace period to the growth cycle of the crop for which the loan is to be used. In this way, the moment of repayment is linked to the moment when the farmer can reasonably be expected to have a positive cash flow.
- **Revolving funds** which were allowed as own investment during the first FDOV call in 2012, such as done in [the Access to Sustainable Markets and Food Security for Nicaragua's Coffee and Cocoa producers](#) (FDOV12NI01) project and the [4S@scale coffee project in Kenya \(and Uganda\)](#) (FDOV12KE06). Here, the coops function as the collateral, and inputs can be recuperated through the sales of the produce. A disadvantage to consider is that cooperatives carry the most risk in this scenario. Furthermore, the promotion of (group) savings to reduce dependency of external financing and the improvement of financial literacy by training are important factors to ensure sustainable revolving funds.

Improving food security and nutrition

The PPP module of the FDOV portfolio provided opportunities to work in collaboration with relevant sectors to address food and nutrition security (FNS) issues. The FDOV aimed to positively contribute to food security among beneficiaries, where subsidies used private investments and entrepreneurship to increase the availability of nutritious foods and to improve diets as well as access to food(s). Several FDOV projects focused on training farmers in good agricultural practices and improving their access to market, with the idea that this would result in improved yields and better purchasing power of (nutritious) foods. Alongside this, it was important that the projects addressed a nutritional deficiency and/or addressed factors constraining improved food availability, such as by introducing (nutritious) foods to the market.

Improving food security and nutrition

Within the FDOV portfolio, numerous projects focused on food security by improving production and creating viable agri-businesses, following the logic that higher production resulted in higher incomes and purchasing power. Projects focusing on nutritious food like vegetables, dairy, fish, legumes and nuts also held potential to directly contribute to nutrition improvement, as most target groups did not necessarily lack access to food in general, but rather to vitamin and mineral rich foods, such as healthy proteins, legumes, fruits and

¹⁴ [BoP, MDF & RVO., Inclusive PPP's, 2018.](#)

vegetables. In the portfolio, only a few FDOV projects focused on nutrition specifically. One example includes the [Sustainable bean project for smallholder farmers in Zimbabwe](#) (FDOV14ZW37) project, which focused on the introduction and promotion of a new (dry) bean variety to increase availability and accessibility of nutritious food. Their strategy was to develop the new variety in the country with direct involvement of national authorities, which proved successful. The involvement of smallholders in seed production, the focus on smallholders (50% women) as customers and the attention for own consumption all contributed to inclusive income generation and food security among smallholder farmers. By the end of the project 5,470 farmer households were reached and benefited, contributing to improved access to nutritious food for 32,820 persons.

Other projects contributed to nutrition improvement by **raising awareness** and providing **nutritional education** to farmer households. Others focused on the **diversification of crops** at farmer and/or local level. Crop diversification via intercropping models was shown to increase resilience to weather and market shocks, increase biodiversity, provide income streams but also to **increase access to nutritious foods**. Another added benefit was that the excess crops could be sold at the local market, thereby not only increasing income for the seller but also supplying more nutritious foods at the local market. Yet a lesson drawn is the importance to consider **the selection and combination of crops in these projects**, as that determines possibilities for income generation as well as influences which nutritious foods come onto the market. The FDOV portfolio showcased the value in promoting intercropping by using crops where there is market demand, or efforts are done in vain.

Measuring food and nutrition security

A challenge across the FDOV portfolio was how to accurately measure improved FNS. The income dimension was feasibly monitored as increasing income among (smallholder) farmers and/or labourers was often one of the objectives for several FDOV projects. Indicators included the number of direct jobs, sources of income, and so forth. Food security was measured by the number of beneficiaries reached and scale of production. Only a few projects specifically monitored nutrition. As the focus of most FDOV projects was on private sector development and increasing agricultural production, with an indirect contribution towards FNS, it is understandable that there was a comparable smaller focus on nutrition. Yet, the projects that did focus on nutrition bring interesting insights. For example, the [Vegetables for All project in Tanzania](#) (FDOV12KE02-B1) project explicitly included nutrition improvement as part of their outcomes. Here the **use of a survey was proven to be key**, which saw changes in vegetable intake, dietary diversification, perceived benefits about vegetables and vegetable cooking time. Similarly, the [FoodTechAfrica](#) (FDOV12KE03) project used a survey and observed consumption behaviours among the target group, the average frequency of fish consumption (especially tilapia), differences in where the fish was bought, quality of the fish bought, barriers to fish consumption, drivers for consumption, and so forth. Overall, the above-mentioned examples illustrate interesting ways to measure nutrition that could be considered in the future.

The FDOV portfolio managed to monitor income and FNS at project level, but the portfolio highlighted that it is difficult to measure the extent of impact on food security and nutrition. Measuring FNS and income is complex because it is continuously affected by external influences (e.g., market prices, climate change, socioeconomic circumstances, etc.) and vulnerable to change over time¹⁵. Moreover, as the FDOV projects typically ran for only a few years (3-7 years), measuring FNS and income in terms of sustainable livelihood improvements was often outside of scope of the project. Monitoring systems should be realistic and should fit with the expenditures of project interventions, whereby, for example, the use of such a survey could prove useful. In terms of obtaining a broader and more long-term perspective to sustainably improve livelihoods, including food security, one would need to apply a local food system analysis, which goes beyond the scope of individual FDOV projects. Yet, it raises a question for future programming and how to measure (in)direct effects. If indirect effects are not built into project design or Monitoring & Evaluation (M&E) systems, it is difficult to make meaningful observations. Here a lesson is drawn to consider this further, especially if future partnering considers the interconnectedness of FNS and aims for integrated approaches with long-term effects.

Enhancing gender and youth inclusiveness

The FDOV portfolio had an inclusive business model in terms of providing goods and/or services on a commercially viable basis at scale to people at the base of the economic pyramid (BoP). This was done by making them a part of a company's core business value chain as suppliers, distributors, retailers, or customers¹⁶. The direct beneficiaries included mostly (semi-)commercial farmers, where some projects may have (in)directly targeted subsistence farmers¹⁷. Primary beneficiaries of the FDOV thus did not include resource-poor rural dwellers or smaller subsistence farmers. In the second call of FDOV (2014), gender was mentioned as a cross-cutting theme and FDOV projects needed to "address the position of women, or an

¹⁵ [NWGN, Lessons from Dutch PPPs on food and nutrition security, 2021](#)

¹⁶ [BoP, MDF & RVO, Inclusive PPP's, 2018](#).

¹⁷ [ibid](#)

explanation should be given of how the intended result can be achieved without specifically addressing the position of women”¹⁸.



Targeting specific groups, including women or youth, often requires incorporating special measures/activities into the project design. Examples of this include taking specific skills of the target group into account when shaping the project’s business cases, or taking into account additional care-related responsibilities that female workers have (e.g., day care, as done in the [Every Bean has its Black project \(FDOV14GT03\)](#))¹⁹. Numerous FDOV projects explicitly targeted women or youth by **increasing women’s or youth participation, strengthening women/youth-dominated sectors to increase their position within the value chain or working with agricultural practices that cater to the cultural expectations**. The projects highlighted that it is important to identify and focus on those economic or agricultural sectors where opportunities for women and youth are most prominent (e.g., due to labour intensity, access to and control over resources, access to markets, etc.). It **requires understanding the cultural perspective on gender roles and working with the culture to incorporate the targeted project activities**. For example, the [She sells Shea project in Burkina Faso and Mali \(FDOV14BF026\)](#) focused on strengthening women’s entrepreneurship in a sector with 90% representation of women. Representation of women was high in this sector because shea trees often grew on common lands, so harvesting shea nuts did not require land ownership which was a barrier to many women. As a result, the project provided additional sources of income for women by processing shea nuts into shea butter for export markets. Another example includes the [Dairy Equipment project in Ethiopia \(FDOV14ET33\)](#) which was aware that for commercial dairy farming, direct involvement of women was key. The project made use of the cultural habits that cows belong to the men (focusing on number of cows) and the milk is owned by the women (focusing on higher milk production and thus more

¹⁸ [20140807 Final FDOV policy English version \(rvo.nl\)](#), p. 22

¹⁹ [KIT & RVO, Women and Youth, 2022](#)

healthy cows), and as a result provided training on dairy equipment for mostly female farmers. Another success factor in increasing inclusiveness and participation was when level of technology and training offered to women and youth, such as easy farming technology facilitated by mechanization and combined with organizational strengthening. For example, the [Development of Sustainable Dairy Villages project in Indonesia](#) (FDOV12R107) project increased young people's enthusiasm for the dairy sector by modernising the dairy sector and introducing technology-based farm management techniques, such as an automated milk registration and payment system. Youth indicated that being a 'modern farmer' was an interesting and promising profession.

Overall, an understanding of which cultural and contextual barriers exist for women and youth from participating and what would facilitate their involvement can help during the project design phase as well as throughout project implementation. A general observation from the FDOV portfolio was that project implementation should be sufficiently **flexible** to allow adaptive management and necessary adjustments in design of the interventions over time. This also includes reassessing initial assumptions and tailoring interventions better to the local context in terms of gender and youth inclusivity. However, if gender transformation is to be a core concern rather than a cross-cutting issue, it needs concerted effort and the appropriate staff and resources for implementation.

Promoting PPP approaches

The FDOV portfolio provided that public, private, civic and research organizations collaborated on a common project goal that would positively contribute to the world's food supply and increase vegetable consumption. The partnerships were expected to promote the pooling of knowledge, expertise and financing, and there was the assumption that effective collaboration between these different actors could potentially lead to greater impact and innovation. In general FDOV partnerships were found to collaborate effectively and share their expertise and knowledge. The private sectors entrepreneurial and market-oriented approach was coupled with civil society organizations knowledge and network in the local context. The research institutions contributed expertise whereas government representatives, alongside other actors provided an enabling environment to allow for partners(hips) to operate. The success factors and lessons per partner are outlined below, following general lessons on the topic of partnerships in the FDOV programme.

Role of the Private partner

Within PPPs the role of the private partner could not be overestimated. The FDOV portfolio illustrated the value of having a **strong private partner**, regardless of whether it was an international, Dutch or local partner. The involvement of a strong private partner enhanced the potential of having a **financial reserve to cover for long-term (unforeseen) investments**, having **contextual knowledge** and **market connections**, as well as contributing effective **technical assistance and/or hardware** (i.e., processing equipment) for sector development. Especially knowledge of the business context and market connections appeared to be crucial for successful business cases, and the involvement of national private actors and/or dedicated national staff within internationally operating private actors was important. General traits which contributed to the success of working with private partners was when they had an **entrepreneurial mindset**, **had intrinsic motivations** to partake in the partnership, and **were problem-solvers**. Finally, having private actors involved from the start of the partnership contributed to the **sustainability of the business case** as private actors were keen to develop their business perspectives via the project activities. Hence an **early involvement of a private partner** can help contribute to the continuation of project activities and long-term development of the sector.

For example, the [Patchouli for export project in Burundi](#) (FDOV14B123) project found its private partners' ample capacity to invest and strong commitment to establish the production of Patchouli to be crucial. It paved the way for structural change and sustainable improvement of the livelihoods of involved farmers and laborers. Overall, **a strong and long-term committed private partner** was shown to enhance capacity and ensure the **sustainability of the business case**. The FDOV portfolio furthermore highlighted that innovative approaches requires involvement and long-term commitment from **local parties**, given their contextual knowledge and long-term business prospects. This can also include a **locally embedded partner** in the local context that can facilitate the intervention. An example of this is the context specific (local) approach and local presence of vegetable seed companies like East West Seeds and Rijk Zwaan, and the embeddedness of their commercial and training facilities laid a solid foundation for structural improvements of the vegetable sector in Tanzania as well as in other countries.

An observed challenge is that several of the PPP's were reliant on private actors for the necessary financial contributions and investments. This came with trade-offs, such as a tendency to focus on the private actors' business activities, power dynamics and financial dependencies. If the latter was the case and the private partner(s) it turned out that unfortunately that partner lacked capacity and/or had to withdraw, this brought about further challenges. Hence, a lesson here is the carefully consider the financial responsibility of each partner, especially in the case of innovative start-ups where the financial risks are high.

Role of the (local) public partner

Active involvement of (national) public actors (i.e., local government) turned out to be beneficial for outreach, scaling and sustainability. Public actors could provide the necessary network and resources to generate a better enabling environment, linkages to the industries and a market-oriented approach that works within the ecopolitical field. Furthermore, they could contribute by adding **legitimacy** and provide assistance in **navigating the bureaucracy** of registration or other market-related challenges. Yet, the involvement and buy-in from public actors (in particular at country and local level) depended to a large extent on the context. This made the systematization of experiences and lessons learned more challenging.

Within the FDOV portfolio, the contribution from public actors varied from constructive to neutral. In the case there was more up-front involvement and concrete responsibilities (e.g. accrediting a curriculum for training, working with extension officers, etc.), the performance of public actors was in general positive. Working with extension officers was particularly an important factor that facilitated trainings and effective knowledge dissemination. Numerous projects benefitted from **closely working with extension officers**, who often knew the context, had connections with the target groups and effectively worked on the ground. The other way round, the (local offices) of the departments of agricultural extension benefitted from new knowledge and learning from the other project partners. In the case public actors were to contribute towards more structural issues (e.g. adjusting or elaborating legislation to register and/or allow import of new species), projects experienced difficulties in managing differing expectations and setting realistic targets to *what* structural changes the public partner could bring. Structural changes often times requires a number of different sectors and actors, which demands step-by-step changes and considerable time. Furthermore, some public partners simply lacked the capacity or time at that time and/or in that context. Overall, a lesson drawn from the FDOV is to **involve public actors early-on** and **set realistic targets** so that collectively thought can be given to scaling-up and structural change(s). Overall, it is important to have **clear roles and expectations**, a clear understanding of how the **project is in line with policy** and **making use of existing public structures**.

Role of the (local) research Institute: training/capacity building,

The role of research or knowledge institutes in PPP's was to provide **evidence-based knowledge and practices**, which can contribute to innovation. The involvement of research institutes also contributed in promoting the exchange of experiences and learning by creating training materials, dialogues or research. Tailored curricula, knowledge transfer methods and materials as developed by projects, contributed to public or other private sector led vocational training initiatives. Finally, the involvement of research institutes promoted the **exchange of experiences and learning** by creating training materials, dialogues or research in some projects

In the case of the FDOV portfolio, often Dutch research institutes were involved, in particular Wageningen University (WUR), which had been involved in 22 FDOV projects. The role here was often in developing and implementing training strategies and training content. Other responsibilities included conducting practical research, monitoring & evaluation and general project management. A few FDOV portfolio's involved local research institutes which in general contributed to develop the training material in collaboration with other partners. The involvement of local institute had the added value of incorporating learning standards in the respective (national) learning materials and/or language, as well as embedding and contextualizing the knowledge.



Role of the (local) NGO partner: project management, contextualization and collaboration

Across the FDOV portfolio, civic organisations (e.g., NGO's) contributed with their experience with **managing projects** and performed well in the area of **monitoring and evaluation** of progress and effects. It also had been regarded that well-established NGO's were **familiar with working within partnerships** and with RVO, thereby being capable to quickly navigate its complexities. Furthermore, NGO's brought about a

comprehension of the local context, understanding and **commitment to various CSR themes** (e.g., gender, climate and biodiversity) and were responsible for **capacity building activities**.

Within the portfolio, NGO's largely consisted of Dutch NGOs which were knowledgeable about the project goal and context, as well as were familiar with navigating with the subsidy and partnership complexities. At the same time, numerous FDOV projects involved local NGO's alongside the Dutch NGO's. Well-established local NGOs played an important role to voice the intentions, expectations and potential benefits of the project. Getting messages across and the target group on board was key for realising inclusiveness. NGO's were able to utilize their **strong local presence and network to reach out** to beneficiaries and other target groups and **embed the technology and/or product in local contexts**. Having a local NGO involved appeared to be imperative to reach targeted communities, especially hard to reach or vulnerable groups. Their value was especially important to honour and work with the respective language, within the culture, being aware of current communication channels and institutions that can be utilized, and also continue on activities beyond the duration of the project if possible.

The PPP model: power dynamics, flexibility and partnering for change

The PPP model of the FDOV programme was found to foster the exchange of expertise and skills between partners. Public partners contributed in facilitating an enabling environment and providing public services. Civic partners were imperative for embedding interventions in the local context(s), reaching the target groups and bringing in project management expertise. Private partners provided an entrepreneurial attitude, financial reserves, a market-approach and investments in production enhancement. Market studies and trainings were utilized by both private and civic partners on the marketing and production side, as well as behavioural change campaigns aimed at consumers²⁰. Here research institutes also played a role, as well as contributing in the development of training modules, embedding knowledge and providing invaluable knowledge on best practices to both farmers and the private partners. Though there are challenges in navigating a partnership, the FDOV programme showcased that there is value in sharing resources and risks as well as the importance of collaboration, adaptability and contextualization.

Overall, FDOV partnerships functioned positively where a few key factors played a role. **Flexibility** was found to be important, as it takes **time** for PPPs to effectively engage and collaborate with one another, especially when all partners are new to one another²¹. The FDOV programme was exceptional in providing long timeframes at times (e.g., 3-7 years), which granted greater possibility for creating impact. This was beneficial for partnering and effective collaboration, as well as scaling and bringing about structural changes in a specific sector. Alongside this, the FDOV programme granted flexibility via its change requests. Projects could submit requests for changes, which was reported to be greatly appreciated by project partners. Naturally the request for changes had to be approved on their compatibility with the original partnership objectives, but the possibility of this option allowed for the chance to adjust to a changing context and market if necessary. This was a lesson and showcased that flexibility is possible within a subsidy instrument like the FDOV programme.

Good communication underpinned the success in coordination and effectiveness of any project activity. Via regular communication, stakeholders and partners got more acquainted with the project, project execution and delivery improved and opportunities for further collaboration were explored. It also opened up possibilities to acknowledge the efforts done per partner and reflect what each partner can actually

²⁰ [Royal Tropical Institute \(KIT\), Mid-Term Review of the FDOV, 2016](#)

²¹ [BoP, MDF & RVO., Inclusive PPP's, 2018.](#)

contribute. It also opened up opportunity to **navigate high expectations** from all sides in delivering on various goals as well as **managing clear expectations**. Furthermore, partnerships functioned well when each **partners' strengths related to their allocated role and responsibilities**. This meant when there was a common goal whereby each partner knew how they in turn could offer their skills and expertise, and their roles were within their capacity. This includes being truthful about a partners' capabilities and allocating responsibilities to those who can fulfil which target the best.

Finally, **consistent project management** with an unchanging project team also helped ensure that the partnership operated effectively and with ongoing momentum. However, partnerships are dynamic and an array of FDOV projects experienced partners leaving due to various reasons (e.g., not being able to fulfil commitments, not meeting expectations, having different interests, lacking capacities to fulfil obligations or unforeseen circumstances). A challenge was how to navigate the allocation of responsibilities and the (financial) burdens placed on partners, especially when partners leave the partnership. At times, a new partner was more beneficial in providing their capacity and resources but there are challenges in terms of project delays and extensive resources needed to find an appropriate replacement. Several projects reflected that partners who did not deliver and/or withdraw could do so without any consequences. Yet, with a partner leaving, more responsibility on the remaining partners is placed to continue fulfilling targets and commitments. This can generate confusion and misunderstandings as to what each partner can and should contribute, and raises the questions how partnerships can be helped in the reallocation of roles and keeping all partners accountable. For some, open communication and reflection points were steps to address these issues.

More information

The FDOV programme has contributed to private sector development in developing economies over the past decade, in particular by supporting scaling-up agricultural subsectors and capacity building. The FDOV portfolio allocated subsidies to an array of PPP projects, where most projects focused on increasing incomes through improved agricultural production and efficiency, following impact pathways that intersected between private sector development and food security. Project also focused on improving the business environment, as well as promoting food availability and accessibility through increased food production. As a whole, a decade of FDOV has allowed for greater funding, allocation of resources and network, which in turn has accelerated certain activities and scaling in relation to SDG 2, SDG 8 and SDG 17.

For more information about the FDOV, please consult the [Facility for Sustainable Entrepreneurship and Food Security - FDOV | RVO.nl](#) website, the [Food security for all | RVO.nl](#) website and/or read available documents on [FDOV Publications](#). For further information of FDOV surrounding themes, please refer to the KIT publications on [Climate change](#), [Employment and income](#), [Women and youth](#) and [Food security](#).