Value-chain Development

DryDev is transitioning farmers from subsistence agriculture to rural commercialization in Ethiopia

Impact brief series

Background

More than 82 percent of Ethiopians are engaged in agriculture – most of whom are subsistence farmers and heavily reliant on rain for production. Frequent droughts, land degradation, a lack of training on effective agriculture practices and a lack of access to equipment, improved technologies and markets are often identified as the reasons behind farmers' inability to earn adequate income.¹

Efforts to restore degraded land and improve resilience to climate change are mostly successful when the returns – including income – from these investments are rapid and substantial.² Therefore, land restoration requires a strategy which can quickly and efficiently convert the increased water availability and improved natural resources into food and income. DryDev is using value-chain development (VCD) as the means to link land restoration with income, helping farmers transition from subsistence farming to rural commercialization.

VCD is being undertaken by the programme for nine selected commodities: onion, haricot bean, milk, ground nut, potato, poultry, tomato, shoat fattening and honey across 29 subwatersheds of six districts (or woredas). Two value-chain (VC) commodities are being promoted in each DryDev site.

What has DryDev already achieved?

As of June 2018, 17,140 people (including 7,100 women) have participated in various VC activities across six woredas. Over 9,250 farmers have been trained on post-harvest management and 17,144 farmers have been linked to markets.

According to DryDev Uptake survey 2017:

- Out of those participating in production of the selected VCs, 85 percent reported an increase in yield and 76 percent reported an increase in volume of sales.
- 76 percent of farmers in targeted sub-watersheds are now linked to markets.

Farmers have reported an increase in bargaining power and capability in decision-making and credit it to their increased access to market information and ability to link with more than one buyer. The need to pay for a broker has been reduced and as a result, farmers' incomes have improved. In addition, while access to agricultural land is an issue for young people and women in Ethiopia, many are engaged in VCs where land is not required (e.g. poultry, shoat fattening), therefore can still earn a livelihood. The hope of earning income and becoming self-reliant is helping reduce migration, especially for young people.



An independent external review of the DryDev Programme (2018), commissioned by the Ministry of Foreign Affairs of the Netherlands has concluded:

"DryDev beneficiaries, both men and women, are increasingly acting like commercial farmers and indicated that their livelihoods and household incomes have increased."



Bachewe, F (2009), The state of subsistence agriculture in Ethiopia: sources of output growth and agricultural inefficiency, PhD Dissertation, University of Minnesota. Available online at: https://conservancy.umn.edu/handle/11299/54278

Ethiopia

^{2.} Roose, E, Bellefontaine R, Visser, M (2011) Six rules for the rapid restoration of degraded lands: Synthesis of 17 case studies in tropical and Mediterranean climates, Sécheresse 22: 86-96.

How has DryDev made this happen?

DryDev's work in VC development has been a part of an integrated development programme delivered to selected sub-watersheds.

VCD is introduced in contexts where farmers are actively participating in land restoration initiatives, where productivity is being enhanced by capacity building and where savings groups are promoted.

This holistic approach has been a key to the success of the VCD work. DryDev's external review (2018) supported this point by concluding:

"It is the linking in the Work Packages of sustainable land management interventions with market access, VCD, and access to finance and credit, that sets DryDev apart from other agricultural support projects. The holistic approach on sub-catchments areas has been key for the DryDev success in Ethiopia."

Commodities were selected by undertaking a VC analysis of 12 commodities and in consultation with the communities during the Community Action Planning process in the first year of implementation. Vulnerable groups, such as women and young people, and their access to and control over productive resources such as land, were also considered. As a result, commodities with a higher potential to benefit vulnerable groups, such as poultry, milk and shoat fattening, were selected.

Numerous interventions and activities focusing on various parts of the VC were addressed by the programme. While there were interventions unique to certain VCs, such as establishing a milk processing plant, an analysis of VC-related interventions in all woredas indicate the following common elements:

- Farmers were organized into producer and marketing groups and were trained in developing business plans.
- Farmer organizations have been trained in recordkeeping and the importance of maintaining and referring to their records.
- Farmers were linked with input suppliers to facilitate access to improved inputs.

- There was a focus on developing farmers' capacities and improving access to materials on commodity production, on post-harvest management and value-addition.
- Access to finances, through the creation or strengthening of saving groups, and linkages with Rural Savings and Credit Cooperatives (RuSACCOs) and/or micro-finance institutions (MFIs), was addressed and improved.
- Multi-stakeholder platforms were formed, which regularly brought together various stakeholders. These included farmer representatives, woreda and kebele administrations, representatives of various government sector offices, farmer union representatives, financial services providers, research institutions and representatives of major input suppliers and buyers. Key challenges were discussed, solutions identified, action plans were prepared and progress on previous plans were analyzed.
- Access to market information, through various mediums, as simple as the use of information boards at the kebele office, as well as more modern and broad-reaching methods such as radio broadcasts, have been addressed and improved.
- Farmers were linked with markets and periodic business-to-business meetings were organized.

Some of the challenges faced by the team in this VCD process included:

- Farmers and buyers did not always adhere to their agreements. VC concepts were new to people in most of the targeted sub-watersheds and people had never participated collectively in any specific or selected VC. Building trust took some time.
- For some VCs, due to the small number of memberships in some cooperatives, it was not always possible for them to meet market demand. Membership is gradually increasing.

Mr Gebre Medhin, 27, is a member of an egg producer group in Tseada Emba and was once looking to migrate to Saudi Arabia. He started his poultry business with a small loan of 300 Ethiopian birr (US\$10) and now earns 3000 birr (US\$110) per month.

"My views have changed, I no longer need to go to Saudi. My income is improving and my future is filled with hope." The concept of VCD is not unique to DryDev. However, embedding this within landscape restoration and agricultural enhancement has been unique and is an approach that can be scaled up to other areas. DryDev external review (2018) concluded that:

"In Ethiopia, the new cabinet is reportedly interested in implementing 'what works' and it is the sequential linking of soil and land management to value-chains and markets that has worked particularly well under DryDev. This provides a huge opportunity for the DryDev partners to expand and upscale the DryDev approach (undertaken in six woredas) to the 177 SLMP [Sustainable Land Management Programme] woredas that have in many ways completed WPs I-3 and need linkages to WPs 4-6 to graduate to commercial self-sufficiency."

Points to consider for scaling up

- Use an integrated approach: improving landscapes to improve productivity and then linking with markets can help improve farmers' income and enhance food security.
- Select commodities which are inclusive and can help vulnerable segments of the population participate and impact their livelihoods. This can be particularly helpful in reducing the migration of landless youth.
- Establish multi-stakeholder platforms and ensure periodic meetings. This provides opportunities for interaction among various stakeholders and helps to resolve issues.

Multi-stakeholders platforms increasing trust among value-chain actors

Marketing systems for vegetables in most parts of Ethiopia are highly conventional. Prices depend largely on supply-push rather than demand. Farmers often have a limited understanding of exactly what the market wants and when. They produce according to the season, which causes farmers to oversupply and are forced to accept lower prices. Market information is patchy, so farmers struggle to learn how to gain better prices for their produce.

Middlemen and traders profit by snapping up these small volumes, consolidating and then sending them to a market they have identified. As a result, the marketing relationship lacks trust among market players. In the vegetable market in particular, middlemen tend to be highly pervasive and block direct contact between buyers and producers.

Onion growers in DryDev intervention sites in Boset woreda were faced with all of these challenges. The producers were feeling exploited by the brokers and the traders were complaining about farmers' inability to provide onions of a suitable size and colour – price deals were made with advanced payments that farmers did not always honour. A lack of trust remained a key issue between producers and buyers.

Clearly the complexities associated with the market system are too difficult for any one party to resolve, and all parties need to take steps to address these challenges. To improve market relations, DryDev initiated and facilitated a multi-stakeholder platform that enables all actors, such as producers, local institutions, the public sector, private businesses, researchers, financial institutions and brokers meet periodically and jointly drive onion marketing for the benefit of all.

Farmers can access inputs on the right price and have access to market information and negotiate prices. They can take loans when needed. Traders, on the other hand, have the confidence that they will get produce of agreed quality and quantity. Trust is increasing among stakeholders as are the benefits to smallholder farmers.



A snapshot of value-chain work in DryDev intervention sites

In Tseada Emba, 2500 people (940 men, 810 women and 750 youth) are participating in poultry

VCD. Following the introduction of improved varieties, training in poultry management and linkages with input providers (such as poultry feed), productivity has increased from 60 to 240 eggs per bird, per year. Participants have received training and are now practicing post-harvest management practices such as using egg trays and holders to reduce losses. Access to credit has been facilitated through savings groups, RuSACCOs and MFIs, and farmers have been linked with multiple buyers in the city market and Adigrat University has also become a regular customer. Youth have been engaged and can see a future in the area and do not need to migrate to earn a living. DryDev sites have now become learning centres on small scale poultry production for income generation.

In Boset, 1,040 farmers (681 men, 201 women and 158 youth) are participating in VCD with

haricot bean. Farmer cooperatives have been linked with unions, research centres and traders for input and output markets. Credit is accessible through RuSACCO and MFIs such as WALQO. As a result of additional training on agricultural practices and the use of improved seeds, productivity has increased from 1.6 tonnes/ha to 2.5 tonnes/ha. Farmers are trained on post-harvest management and are using geomembrane, weighing balance, threshers and air tight bags to improve post-harvest handling. Tokuma Cooperative is now licensed to produce certified haricot bean seed.

In Jarso, 368 farmers (172 men, 110 women and 86 youth) are engaged in VCD of potatoes in DryDev sub-watersheds. Through the introduction of improved seed varieties, linkages with input suppliers and training on good agricultural practices farmers have seen their productivity increase from 18 to 26 tonnes per hectare. Farmers are trained and are applying postharvest management and value addition practices such as sorting by size, using ventilated sacks and using a weighing scale instead of selling by estimation. Farmers are now linked to buyers in Harar, Kombolch and Diredawa, and having access to more than one buyer has increased their bargaining power and profits.







In Gursum, 840 people (240 men, 480 women and 120 youth) are engaged in milk VCD. Producers are linked to input suppliers; have access to finance through savings groups, RuSACCOs, and MFIs, and have been trained on how to increase productivity, management and how to test for milk quality. A milk collection centre and processing unit has been established in the woreda centre. Farmers are receiving a better price and the rate of spoilage has minimized. The centre collects milk and supplies it to various buyers in the town, and prepares butter and yoghurt, selling these products in local and town markets. In addition, women run a café within the collection and processing centre and earn a regular income.



In Kilte Awulalo and Samre, 1,582 farmers are engaged in honey VCs. As a result of training and the introduction of improved bee hives from the programme, productivity has increased from 12-19 kg per hive to 23-25 kg per hive. Various post-harvest management and value addition practices, such as wax extraction, and sorting and packaging are being practiced. Farmers are linked with Mekelle, Kilte Awulalo and Samre town markets, Seharti Samre Union, Meles honey processing and marketing unions, and honey processing institutions like KUMEL. Landless or unemployed youth are becoming interested in beekeeping as a business, and successful young honey producers have become symbols of progress and have been inspiring others.

In Boset, 772 farmers (423 men, 133 women and 216 youth) are engaged in onion VCs. Due to the increased availability of irrigation water and training provided on good agronomic practices, productivity has increased from 20 tonnes per hectare to 30 tonnes per hectare. Farmers can now sort onions by size and sell the categories separately. Farmer cooperatives are linked to wholesalers in Addis and Meki Batu Farmers Unions and have signed agreements for supplies of onions. This has minimized the cost of brokers and farmers' incomes have doubled.





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