

Enabling access to clean agricultural inputs and technologies: Improving farmer yields and businesses turnover

In the Growth and Transformation Plan (GTP-II), agriculture is considered the main driver of rapid and inclusive economic growth and development for Ethiopia.

The plan also states the importance of continuing to build a climate resilient green economy.

Supporting the agriculture sector

The GoE with technical support from the Land Investment for Transformation (LIFT) programme is issuing Second Level Land Certificates (SLLC) to increase the land tenure security of farmers. As a result, farmers are more willing to invest in their land in a productive and sustainable way. However, to allow for increased productive investment, farmers must have access to improved agri-inputs and technologies that are climate smart: this is currently a challenge in most rural areas.

To address this, LIFT is promoting the use of clean agricultural inputs. We are partnering with municipalities to convert biodegradable city waste into organic fertiliser through the establishment of compost hubs. We are also supporting high-quality, environmentally friendly input suppliers to develop their distribution networks through established input hubs that provide embedded services to farmers.

Promoting clean agri-inputs

LIFT is partnering with private sector players to promote the use of clean, improved agriculture inputs that will unlock the potential for sustainable growth and profitability for smallholder farmers. Our goal is to enable farmers to gain access to:



Compost, which addresses depleted soil levels and poor organic matter caused primarily by the cultivation of the same crop over the years and the excessive and inappropriate dosage of chemical fertilisers (DAP and Urea).



Vegetable seeds, an important addition to the grain and legume seeds that are distributed by the government through cooperatives and other suppliers. Currently farmers can only access seed that is available at unreliable local markets, which is often of unknown or poor quality and sold by unscrupulous sellers.



Irrigation technologies, as they enable farmers located in irrigable areas to grow two or even three crop cycles in a year. Drip, sprinkler and furrow irrigation technologies are being promoted to unlock higher yield potential.

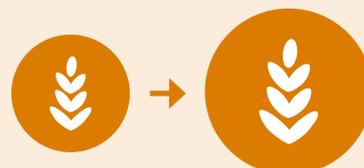


Clean crop protection products such as bio-pesticides, which are free from chemicals, avoid harm to the environment. To date, local markets only offer chemical products whose residue has a negative impact on soil organisms and nearby water sources.

Benefits for farmers

- 1 Compost hubs:** Accessing and using high quality compost brings benefits to farmers as it:
 - **Increases organic matter** in the soil.
 - **Reduces the use of inorganic fertilisers**, improving the preservation of soil quality. Compost contains slow release nutrients, including phosphate, potash, magnesium and sulphur.
 - **Improves soil structure** for better workability and better crop establishment. It also leads to improved water management, and the soil becomes easier to work, saving fuel and time.
 - **Inhibits pests** and diseases within the soil.
- 2 Input hubs:** Accessing improved, clean inputs and technologies also benefits farmers, since:
 - **Improved seeds** are one of the least expensive but most influencing factors for increased yields. LIFT is partnering with large importers of vegetable seeds to help them develop distribution networks with local input sellers that allow for a continuous supply of improved seeds to farmers.
 - **Irrigation technologies** enable farmers to cultivate their land up to three times a year, unlocking higher yield potential. LIFT is partnering with irrigation companies to promote efficient irrigation techniques that will be accessible through the input hubs.
 - **Biopesticides** help control pest attacks, which can seriously harm crop productivity. They do not contaminate the environment, the crop, or the people applying it. LIFT is working with a local business that develops biopesticides using local herbs, as well as suppliers of rhizobia inoculants for pulse crops.

Higher quality seed can
increase farmer yields by
up to 100%



Benefits for businesses

During the 2017 rainy crop season, the following inputs have been sold by the input hubs that have benefited from LIFT facilitation services:

275 kg

of vegetable seeds

135,400 mg

of bio-pesticides

137,770 kg

of compost

2,519 kg

of Rhizobia inoculants

One of our partner suppliers increased its sales by **ETB 450,000**. Demand for the new agricultural inputs is high. By June 2017 input hubs had recorded more than **22,000 transactions** of vegetable seeds, rhizobia inoculants, compost, bio-pesticides and sprayers. The input hubs are selling the products even beyond LIFT woredas. In Amhara alone, transactions are recorded in four non LIFT woredas.

What LIFT-EEU does

- 1 Working with Soil & More Ethiopia and local municipalities to establish compost hubs at woreda level. The compost hubs are engaged in production and marketing of compost produced with Controlled Microbial Compost (CMC) technology and offer environmentally sustainable solutions for waste management and soil nutrient amelioration.
- 2 Working with established input hubs by linking them with input suppliers and helping them to promote the products to the farmers.
- 3 Working with CASCAPE and FGI to train farmers, Development Agents and agricultural experts on Good Agricultural Practices and to introduce best fit cereal crop and fodder varieties to farmers in Oromia and Amhara.

Story from the field



Compost Hub
Location:
Alamata, Tigray

LIFT is supporting by linking them to new markets, so they increase their customer size.

The compost hub in Alamata is operated by Tsegay and Abera Share Company, a cooperative where the 20 members are all former soldiers.

The cooperative collects solid waste from the community, turns it into compost and then sells it in bulk to its clients. They currently employ 10 day labourers who receive ETB 2,000 per month each to help separate the waste. Before obtaining support from LIFT, the cooperative did not engage in compost production. The cooperative received support from LIFT on how to create compost and improve the efficiency of the process and to develop a commercially sustainable business model for the company. Currently, LIFT is also supporting them to expand their client base through demonstration days and other marketing activities.

Tsegay and Abera sell on average 40 MT of compost per month to the municipality at a price of ETB 145,000 per MT. They also sell their compost to a commercial agriculture investor who uses it for mango and papaya cultivation. Overall, they sell up to 5 trucks per month at 5 metric tonnes per truck and they are planning to increase the volume of production to ensure continued growth. Part of their growth strategy is to attract small holder farmers. To attract them as clients, LIFT is supporting the cooperative to hold demonstration days to show the impact compost can have on productivity.



LIFT findings and research (contact Tesfaye Getachew on Tesfaye.Getachew@liftethiopia.com).