

Hydroponic feed gives hope

ELI Development Services' vision is to catalyse change in South Africa, give hope and grow the economy. ELI delivers skilled entrepreneurs, develops small businesses and supports those small businesses to become sustainable in targeted agricultural industries.

In line with the South African government's strategy of job creation in the small business and informal sectors, the Sishen Wind Energy Facility tasked ELI to take over and optimise an agricultural project that was designed to benefit the communities that the Facility operates within.

The Northern Cape suffered a devastating drought, resulting the area being declared a disaster area in January 2020 and the government setting aside emergency drought relief funding. It was felt that this assistance was not sufficient and was too late, with provincial agriculture already decimated by the drought spanning several years. Livestock farmers were hit particularly hard, with many struggling to feed their animals, resulting in huge losses.

To address this crisis in the vicinity of the Sishen Wind Energy Facility, a waterwise hydroponic system was introduced on the communal lands in Dibeng and Olifantshoek, to help alleviate the impact of the drought on small farmers.



To feed livestock, vast amounts of land and therefore vast amounts of water are required. This challenge had to be addressed to assist the community.

So-called "green feed machines" were erected, which are structures equipped with fans and irrigation systems, powered by solar energy. Seeds are germinated in trays on shelves that run the full height of the structure.

Why hydroponics?

- Highly nutritious feed can be cultivated in controlled circumstances
- Various kinds of seeds can be sprouted to provide nutritional variety
- Water use is minimised by not having to irrigate expanses of land
- The impact of chemical treatments and sprays are avoided as pests do not enter the structure
- Vertical farming reduces the need for land
- Solar energy enables the operation of the facility in rural areas

During the drought, high quality feed could be produced without much water. This enabled a lot of animals to survive the drought and farmers to sustain their livelihoods.

Says Gert Raats, one of the beneficiaries:

“It could not have come at a better time. We’ve had four, if not five years of drought, which was terrible. To the farmers in Olifantshoek, it means a lot. For sheep, this is one of the best solutions that one can have.”

Farmers were trained on the use and maintenance of the facilities. Ongoing care is taken to ensure that the facilities function well and are maintained. The farmers that are involved with the project, will be registered into co-operatives. The vision is that each co-operative will be sustainable and contribute economic development in the communities by enabling livestock farming and also, in time, the sales of feed to other farmers.

ELI provided co-ordination of logistics, administration (including the institutional requirements of a co-operative), finance, technical support and training.

ELI believes that Small, Medium and Micro Enterprises (SMMEs) play an important role in the economy. They can be drivers of economic growth, innovation and job creation in a community, something ELI is very passionate about.

ELI was founded in 1996, as specialists in training and development within the agricultural sector. The business has grown to cover a broad scope of business development services across various Southern African countries. Three core services are provided: people development, fund administration, and enterprise development. On the enterprise development front, ELI is a specialist at developing people and businesses into agricultural supply chains for corporate processors, government programmes and corporate social investment clients.

**Contact ELI on
info@eli.co.za for a
discussion on how
your enterprise
development goals
can be met.**

