

Irrigated Horticulture project- Business Model Cluster.

Ms Mercy is a shareholder owner of Mercy Agrobusiness which farms a 12 acre land producing vegetables, tomato being the leading product from cucumbers, onion, okra and other. The project is at Miyuji, Dodoma urban. She approached LIC while she had a bore hole with the capacity to pump 2000 liters per hour, had irrigation pipes installed across 8 acre land but only farming at most 4 acres. She sold her produce to the neighbors including students from the institute of rural development (IRD), minerals college, women and youths vendors and very little to the urban market. All these buyers showed interest to learn from her “well to do” garden. After a discussion with LIC technical team, Mercy Agrobusiness wrote a concept note to request solar power system to pump water, drip irrigation system, fencing her farm, cold storage, water storage facility and the green house. LIC agreed to co-support all expect the green house which might come in later stages. The total project cost was 76mill. The LIC Investment/support was to the tune of TZS 40 mill while Mercy Agrobusiness contributed TZS 36 mill. There has been more investment from Mercy Agrobusiness’ side than indicated in the concept note as is described hereunder. To date, Mercy Agrobusiness has managed with LIC investment to successfully install **solar power system and drip irrigation system** (LIC had supported 1 acre and Mercy Agrobusiness installed 4 more acres of drippers). There is so much improvement in terms of production and production cost. For instance, the production increase of tomato from **200 Kg to 2000 kg per week** has been earmarked. We are in the process to actualize the just finished solar power installation instead of TANESCO generated power which consume 10,000/= per day. The 4 acre land has been **fenced** to reduce theft and small animal invasion. **A cold storage** has been installed in an insulated 20 feet container to be used in a bumper harvest to increase shelf life of vegetables and address the post harvest loss significantly. Of recent Mercy Agrobusiness managed to keep about 500 kg of tomato which were harvested in a rainy day and would otherwise be rotten.



A number of neighboring farms have started growing vegetables after visiting this farm while a good number of youths and women vendors have been purchasing at a farm gate price which is reasonable for them to supply to their markets. Next step now is to undertake a value chain analysis to better link Mercy Agrobusiness to these and other actors in the value chain and in the geographical area to escalate the business model while still collecting best practice from Mercy Agrobusiness to be shared out to other stakeholders in the meantime. Despite a number of challenges, there have been remarkable changes. “*Kantangaze*”, a very popular viral disease affected the farm in November 2015 and Mercy Agrobusiness lost almost half of the expected harvest worthy 5 Million TZS. LIC have supported linkage to Syngenta, the major inputs provider, mainly for seeds, fertilizers and pesticides who successfully managed to wipe out the disease. Alongside this, the originally installed 20,000 liters (2 x 10.000) water tanks for irrigation from the bore hole were torn down by strong winds in August 2015. Mercy Agrobusiness managed to reinstate 15,000 liters water tanks and resumes operations as normal. During the absence of water some plants suffered water loss for some times which lead to poor harvest. Previously we opted for a cheap solar supplier who deployed a back-up batteries system which failed to operate optimally. The seller collected the appliances and refunded all the paid funds. LIC resorted to use the second bidder, Davis and Shirtliff the company which has now installed a better functioning system, a unique system without batteries. Mercy Agrobusiness contributed 30 % to this investment and the outstanding was credited in LIC account after two days.