

Green Biotech (Tissue Culture)

Create a bigger Horizon in agriculture

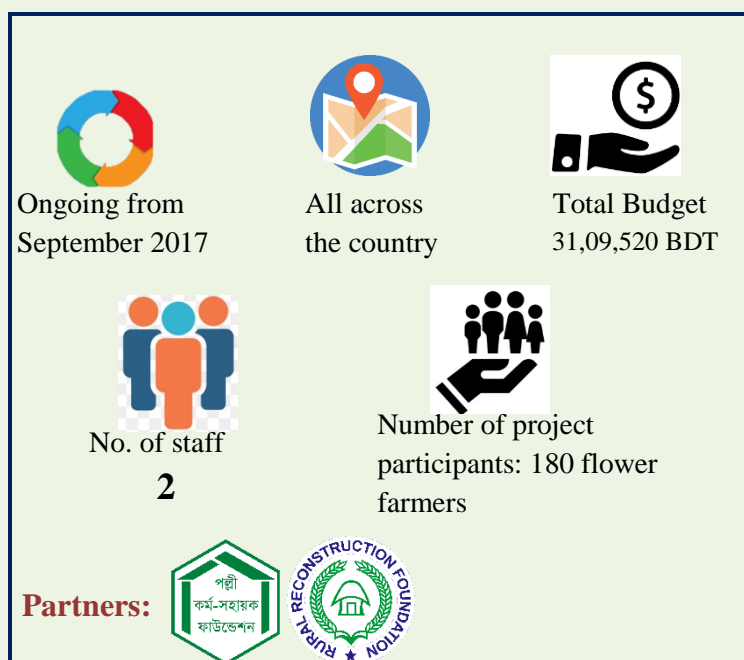
In an effort to defend the floriculture industry, we have started a new journey by introducing the potential. Flower cultivation through tissue culture as new horizon in Bangladesh.

Sub-sector: Establish Flower Tissue culture lab to supply quality sapling and floriculture extension.



Rural reconstruction foundation established a plant tissue culture lab in Jashore named 'Green biotech Bangladesh' with the financial support of PKSF and the International Fund for Agriculture and Development Commercial (IFAD) under an agricultural value chain project namely Promoting Agricultural Commercialization and Enterprise (PACE) From September 2017 to June 2020. Since July 2020 RRF is running the operation of the Tissue culture lab with its own fund. In the tissue culture lab. It aims to Produce Saplings of Flowers's mother plant within the country and make availability of saplings to the farmers at low price. The ultimate goal of this project is to increase farmers' income, livelihood, and extension of floriculture through supplying quality, germ-free healthy sapling.

Program Highlights



Key Activities

- Applying Tissue Culture Technology in the floriculture sector.
- Produce disease free Gerbera plants.
- Reduce Gerbera flower production cost.
- Increased productivity.
- Development of floriculture.
- Research and develop new varieties of flowers.



Feature @ Gerbera Flower

A protocol for the production of gerbera seedlings of a total of 6 varieties has been developed from the lab and in the last 2 years, it has been possible to raise the seedling care and desired results to a satisfactory level in own shade house through the farmers in Gadkhali and Jhenaidah Kaliganj upazilas of Jhikargacha upazila of Jessore.



Feature @ Lilium & Tulip Flower

Alongside Gerbera seedlings, research for protocol establishment of Lilium and tulip seedlings is going on. There 3 varieties for Lilium they are- AMIGA, FRONTERA, EREMA and 2 varieties for Tulip are- LABELA (red colour), ANTARCTICA (white) already in its shooting stage. Within few months we will be succfull to enter in rooting stage.



Feature @ Piloting

- Vertical cultivation of spices.
- Potato plantlet
- Lilium flower



Program Outlook in FY 2021-22

SL	Fact	FY 2021-22	So far
1	Sell of Gerbera Plantlet in numbers	4000 pieces	10579 pieces
2	Sell of Gerbera Plantlet (person)	12	22
3	Free Gerbera plantlet distribution among farmers	200 pieces	3600 pieces

Other Piloting Activities:

SL	Fact	FY 2021-22
1	Potato plantlet production	25000 pieces
2	Mini tuber from potato plantlet production	850 kg
3	Breeder seed potato production	2500 kg
4	Dragon fruit plantation	226 plants



Impact

- Healthy and disease-free flower plantlets have a huge demand in the market.
- Cost-effective plantlets compare than importing or available plantlet in the market. Which is also more productive and financially beneficial than the local market plantlets.
- Create wage employment for poor and ultra-poor households by supplying germ-free healthy saplings by reducing the production cost of flowers.



Challenges

- Damages contamination in plantlet because of weather variation is one of the major challenges of this project.
- Traditional flower cultivators are not much interested in new technologies. Convince them