



Dr. Ramalakshmi Datta

Recipient

Application of Science and Technology for Rural Development Award 2023

It is truly a proud moment for me to receive this recognition. I would like to express my deep gratitude to the esteemed Foundation for selecting me for this Award. It is a great honour to our team as a whole. My gratitude is also due to my family, my teachers, my friends, my teammates and various funding agencies for their continuous firm support and guidance, without which this journey would not have been possible.

Me and my husband Dr. B. K. Datta are a team working at Vivekananda Institute of Biotechnology, with a Mission to reach the grass root level people - the community in the remote areas – with relevant science and technological interventions.

We are in Sunderban region, which is rich in bioresources. While visiting the creeks, canals and islands in this region for my work, I could see the rich natural resources and at the same time utter poverty of the people – especially the dismal condition of the rural women.

My area of work has been Agribiotech and its application for the benefit of rural community. The challenge was to simplify and demonstrate the relevant agribiotech technologies, especially plant tissue culture and make the rural girls realize that they can use it for their benefit and for the betterment of the whole community. I remember today, Banya Dutta, who was the first girl to join our tissue culture lab. She could not pursue her studies after the school certificate examination. Her life had just begun but then she was not getting any way out. She was given the opportunity of getting trained up in the tissue culture laboratory. She was taught to work with the chemicals and sophisticated instruments. She became an example for a few others in the village.

A team of girls (8) from this village, joined us in our journey. They were taught media preparation, skills to initiate and multiply the cultures and data recording and maintenance. A team of women (5) from the village were given a training to nurture (harden) the tissue cultured plantlets produced in the culture bottles and make it ready to be supplied to the farmers for plantation – they became the nursery women. The tissue cultured banana plantlets have reached about 10000 farmers.

The work on Banana Tissue Culture has evolved as Banana Technology - the tissue cultured banana plantlets reaching the farmers; the hardening of the micro-propagated plantlets giving an additional income to the rural women (nursery group). The group could also standardize a simple method for extraction of banana fibre as a rural household technology for women.

"Try to bring out the best in yourself as well as in others. The future depends on what you do at present. Try to be the best whatever you are and wherever you are." These points are always there in my mind, and I try to follow it while skilling, reskilling the village girls and making them meticulously keep the necessary record and data.

“Competency” has been the key word of focus. The village girls turned into “Tissue Culture Lab Technicians” attaining the competency. They had started with banana tissue culture. They now attained competency to develop protocols for different crops that the farmers in this region demanded viz., papaya, seed tubers for potato, elephant foot yam and ornamentals as required by the nurseries nearby Kolkata. The nursery women taking care of the hardening unit have also been imparted the skill training to maintain the

cultures of ornamentals under the multiplication stage. The senior Culture Lab Technicians are the trainers. At the village level, interactions with the women SHG Groups has resulted in selected members (15) successfully taking up the task of seed tuber production of Elephant Foot Yam. The technology delivery at the doorstep of the farmer needed a network or a band of trained rural youth from the target area. The Rural Youth – the para workers – are empowered with knowledge and skills.

Till date, at VIB, they have analysed 1.39 lakhs soil samples in the lab and Soil Health Cards have been issued to the farmers. The major role played by me was on the Delivery Mechanism – Training Pedagogy -which included Development of Competency based Curricula, the Manuals and Organizing the Hands-on Training and the Follow up Programmes for the rural youth.

For reaching the grass roots, in Sundarbans as well as other parts of West Bengal and the Eastern States, I took up the work of contacting and networking the community-based organizations in the Eastern States (54 CBOs working in 67 villages) – with the support of SEED Division of DST, GOI. Through this programme, we could empower the community through knowledge and technology, provide long term employment opportunity through skill up gradation, utilization of available resources and finally bringing out a mechanism for transfer of technology from community to community. We have been working in the area of Technology delivery, particularly those which can change the community livelihood, which reduces migration, trafficking and social evils. If science and technology is in access of community then we can bring a huge change in the life of the people of rural India.

Our effort is to validate a model of technology delivery which may be social enterprise. In our country, large numbers of CBOs are working in the community. A huge scope is there for convergence of their strength, their efforts but they need to be strengthened in many fronts. My experience in working with them has shown that if we are able to have a platform for this purpose, we can bring a sea change in the area of application Science & Technology for the Rural Development.

We aim to build up a strong network of competent, dedicated CBOs and develop a platform to work for the betterment of the community in a sustainable manner.

