



DR. RAMALAKSHMI DATTA

Recipient of the Award for Application of Science and Technology for Rural Development - 2023

Born: September 12, 1964

Dr. Ramalakshmi Datta joined Vivekananda Institute of Biotechnology (VIB) in 1997, as Council of Scientific & Industrial Research (CSIR) Pool Officer. On joining VIB, and during her visits to the creeks, canals and islands in the Sundarbans region to collect the mangrove alga *Catenella* for her work, she saw the rich natural resources in this region and utter poverty of the people – especially the dismal condition of the rural women. During that time, a unit on Plant Tissue Culture was initiated at VIB with the support of the Department of Science & Technology (DST) under its Young Scientist Scheme and the young girls from the village Nimpith were trained to work in this unit.

The Inspiration: Born in Pudukkottai in Tamil Nadu, Dr. Datta was brought up in Delhi. She was deeply impacted by the stories that her father Late Shri S. Y. Raman used to tell about her grandfather Late Shri Y. Srinivasa Iyer, a strict disciplinarian and a devoted teacher with values who had taught hundreds of young children in the rural area. Since her childhood Dr. Datta had dreamt of working in the villages in the countryside. Her mother, Late Alamelu Raman had always motivated her in this aspect. After the establishment of the Plant Tissue Culture Unit at VIB and involvement of the rural girls in the laboratory work, Dr. Datta started realizing that her desire to work in the rural area for the rural people is turning into reality.

The Influence: Her class teacher in the higher secondary, has strengthened her foundation in this aspect who used to say, “Try to bring out the best in you as well as in others. The future depends on what you do at present.” These statements, she tries to follow word to word. It has helped her in training the girls in her unit and making them meticulously keep the necessary record and data.

The Work: Dr. Datta and her team's work is mainly technology generation, modulation, adoption, and diffusion to the people, particularly women of Sundarbans. The concept of plants being grown inside closed bottles was quite a new thing for the people in this region. Awareness programmes were conducted in selected remote areas through “reaching the unreached” programme, to demonstrate that these banana plants were like the other banana plants that they grow in their backyard. A Nursery Group of Women was established who underwent training and they nurtured the tissue cultured plantlets produced in the culture bottles by the “Culture Group of Lab Technician Girls” and made it ready to be supplied to the farmers for plantation.

Dr. Datta feels that her humble contribution is in demystifying the intricacies of Biotechnology, particularly Tissue Culture, so that village girls could perform.

The People: The work on Banana Tissue Culture has evolved as Banana Technology. The tissue cultured banana plantlets have reached the farmers; the hardening of the micro propagated plantlets is established as an income generating activity for the rural women (of the Nursery Group). The group could standardize a simple method for extraction of banana fibre as a rural household technology for women. The Culture Group has standardized the protocol for the ornamentals and other horticultural crops. The Rural Youth – the para

workers – getting trained at VIB - 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.

Dr. Datta's contribution has reached over 17,000 people across 273 villages in 19 Districts of 4 States of West Bengal, Bihar, Odisha and Jharkhand.

Impact on the Community: Dr. Ramalakshmi Datta's work has played a major role in establishing a modern lab as a resource centre to provide support for different Science & Technology (S&T) based programs, aiming to develop the community. She emphasised 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. The multi-skilling training module on Biofertilizer technology gave a scope to the rural youth. It helped to identify the area he or she wants to take up the work on as a knowledge worker and establish a microenterprise of his or her own.

To reach the grassroots, in Sundarbans as well as other parts of West Bengal and the Eastern States, Dr. Datta took up the work of contacting and networking the community-based organizations (CBOs) in the Eastern States. The network of CBOs has given a basket of technologies which could generate improved livelihood, better sanitation, economically empowered and confident youth through skill development programs. The big impact anticipated is that S&T interventions could reduce the gap in the social barrier. In the present scenario, as many of the CBOs are facing problems continuing their work of service, they must be empowered with knowledge, skill, and support to face challenges. VIB must build up a stronger network of competent, dedicated CBOs and develop a platform to work for the betterment of the community in a sustainable manner. Dr. Datta plans to go forward in this direction.

With a vision to build up a platform of sincere, dedicated team members and demystify the technology for the benefit of the community Dr. Datta and her husband, Dr. B. K. Datta, as a team, is working with the mission to further reach the people in the remote regions with relevant S&T interventions.

It is rare to find scientists who innovate in lab conditions and follow it up on the land with social group mobilisation. Dr. Datta's work is a perfect example and initiative of the lab to land a research programme. Her work is truly remarkable from the perspective of making scientific research accessible and beneficial to small farmers. She has trained and employed rural scientists to good effect. Dr. Datta and the team have also given the tools of research to the farmers. Dr. Ramalakshmi Datta's work truly brings science for the development of rural India as she believes in being competent and working sincerely, silently with dedication.

Contact details:

Dr. Ramalakshmi Datta

Joint Director, Vivekananda Institute of Biotechnology

Sri Ramkrishna Ashram, Nimpith, South 24 Parganas - 743 338, West Bengal, India

M: +919002877506

T: 03218-226003

E: rama_vib@yahoo.com

W: www.vibsrn.org

