

Notes on Visit to Coimbatore, Udumalpet, and Trichy, Tamil Nadu

February 26-28, 2015

I organised a visit to Tamil Nadu for a team of officers from the NEC and the North Eastern States to various central and State institutions in Tamil Nadu engaged in tissue culture, tissue research, agriculture innovations, and agriculture cum horticulture related activity of relevance to the North Eastern States. For this visit, Adviser, NEC and horticulture department officers from Arunachal Pradesh, Manipur, Mizoram, and Sikkim participated. AS the visit was around institutions located close to the TN Agricultural University, some of the relevant departments engaged in such activities were also seen by the group.

26th February 2015

TNAU: In the forenoon, at my instance and with the kind cooperation of the staff of TNAU, the team visited the University's Tissue Culture Laboratory which included germplasm selection, indexing, culture, and hardening for issue to farmers; the Extension department to be briefed on the System of Rice Intensification (SRI) for lesser water use with higher productivity, and the Post-Harvest Technology Centre which trains farmers from around the State in using machines provided for use of registered farmer-members to produce marketable products.

Indian Forest Genetics (IFGTB): This is an Central institute set up under the ICFRE, Dehradun and produces and disseminates tissues of agroforestry interest. The institute has done considerable work on Eucalyptus species, Casuarina, Mahua, etc. and provides tissues after hardening to interested farmers.

27th February, 2015

Jain Irrigation Systems Ltd: Proceeded from Coimbatore by car to Elaiyanallur, Udumalpet, Tirupur district where Jain Irrigation Systems has established a Tissue Hardening facility for a variety of horticultural plants such as Mango, Sapota, Pomegranate, Banana, etc. The unit operates on a commercial basis and provides tissue culture plantlets to farmers in bulk. In contrast to most other research-related units like TNAU, IFGTB, and NCRB, this unit uses mechanical methods given the difficulty in getting labour and their high cost. Since the unit was purchased from a previous holder, Terra Agro, many of the building structures were inherited and therefore, any new building for similar use may need to incorporate




economies. It was learnt that a polyhouse with a shade net needed for such hot climates would cost about Rs 600-1100 per square metre. A significant adaptation to mechanical methods was the use of cupped trays for initial growth and primary hardening. These plantlets were removed in a full single row from one tray and pressed into a larger cupped tray by mechanical methods and the larger trays kept on a platform that rested on wheels to be towed away to the concerned polyhouse when loaded. The initial tissue plantlets are obtained from the mother lab and unit in Jalgaon, Maharashtra operated by Jain Irrigation. The facility had labs for quality control.

Proceeded thereafter to Trichy by car. Saw a **solar drier** of about 66 square metres on the roof of a Teachers' Training College owned by Dr Sivaramakrishnan. The drier costs about 7 lakhs and includes blowers run by PV solar cells to draw off the humidity to required levels. During the night, when temperatures fall below 50 C, heaters are provided to keep temperature inside above 60 C to ensure rapid drying. A large number of fruits and vegetables have been dried in this solar dryer.

Visited **National Research Centre for Banana**, Podavur, Trichy. The Centre has done considerable work on identifying plant stock that has minimal viral infection. Since the North East has many varieties of banana and there are many problems in tackling viruses, the team took a lot of interest in the interaction. The team especially the NEC has noted details of the work areas of NCRB for developing specific interventions in the North East in addition to the work recently agreed by NCRB with Government of Nagaland.

Thereafter, the team visited a village and interacted with farmers on their experiences with SRI and the productivity, etc and then returned to Coimbatore while I returned to New Delhi via Chennai.

28th February, 2015



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