## Tissue Culture Technology for Rural Agriculture Development: A case study in Hambantota

Ilirimburegama K\*, Nishantha HNG and Hirimburegama W K\*

Agrotechnology & Community Service Center, University of Colombo, Weligatta, Hambantota, Sri Lanka (\* Department of Botany, University of Colombo, Colombo 03)

## Abstract

The topic "tissue culture technology for rural agriculture development: a case study in Hambantota" was selected because of the importance of adopting biotechnology in our country, where agriculture is still the main income of the rural sector and Agric producer/ the farmer, is faced with open economy, globalization and with WTO trade policies but hardly with any modern biological/agricultural technology for food production.

Tissue culture technology is a soil-less type of growing and can be defined as "Growth of plants cells, tissues, organs or organisms in an aseptic condition on an artificial medium in a glass or plastic vessel". Globally, tissue culture technology has advanced to such an extent that it is now recognized as a multi billion \$ industry.

Magampura Agrotechnology & Community Service Center, University of Colombo located in a rural sector at Weligatta, Hambantota (250 km from Colombo) is an ongoing project to assist rural development through science & technology, especially agroblotechnology. This project is the first ever kind developed by a University system in Sri Lanka in collaboration with Government & other organizations.

Main Objectives of the project are for University to play a direct role in directing development activities of the rural sector of the country and to fulfill one main responsibility of universities – Extension/Community services, while being engaged in Teaching and R & D. The universities and researchers are linked through the center, with the community for an effective transfer of science/knowledge & technology. The attempt is to educate & empower especially the women and thereby to achieve rural vector development.

## 1.0 Introduction

Almost 60% of the 19 million population of the country lives in the rural sector where agriculture is the main source of income. However, agriculture presently has become uneconomical to the rural farmer due to many reasons: lack of novel technology is the main. As a result, the present younger generation in the rural sector is not attracted to agriculture. Therefore, it appears that the contribution by agriculture to the economy is declining even though a country like Sri Lanka with abundant natural resources (i.e. unlight, water and soil), agriculture & agro-based industry should play a major role. Therefore the country needs to give high priority for commercial level agriculture and agro-industry, especially in the rural sector. Science & technology need to be transferred to make agriculture a commercial venture. The role of scientists in this aspect is indispensable. With science & technology, the agriculture produce could be of high quality and compatible with international level.

1