The Rainfall Simulator System @ NLRI

Recently, a Rainfall Simulator System was installed at NLRI campus that houses the horticulture plantations and a high-tech nursery. It will serve as a mini-laboratory under the faculty of climate change. The mechanical simulator model comprehensively demonstrates the effects of the rainfall & rainstorms on soil health. It can effectively analyze the impact of rains in different intensities on soil erosion, soil erodability, soil displacement and other physical parameters.

It is expected that the instrument will serve as a very critical learning material for all future participants and will give them a near realistic hands-on experience of examining soil erosion processes.

The simulator will facilitate following technical calculations related to soil mechanics and soil science:

- Infiltration Rate
- Run-off Rate, Run-off of organic matter from soil, and deterioration of the nutrient contents from soil
- Permeability Rate
- Water Intensity and its effects on soils
- The pattern of soil erosion, its path, and different parameter of soil erosion in different types of slopes, soil types, soil- length etc.
- Soil Erodability

Demonstration of Rainfall Simulator during the visit of Mr. Sunil Chandra Sharma, IRS, CEO-GVT @ NLRI on 11.05.2013