Small Banana farmers in St. Vincent, W.I pilot Farmer Participatory Research

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Purpose The purpose of this poster is to present the experience of 30 small banana farmers in St. Vincent, West Indies, who piloted a Farmer Participatory Research method to investigate a common, serious and urgent problem.

Many of the smaller Caribbean islands depend on export of bananas to sustain their economies. Within recent times however, restrictions on trade, tariffs, and quotas imposed by importing countries have seriously affected incomes, with resultant negative impact on levels of living. Further, in farmers’ fields, a serious noxious weed, Watergrass, has taken over. This weed depletes the soil of nutrients and harbors a serious pest to banana, the root-knot nematode. Yields are reduced and plants topple very easily when affected. Further, importers have banned the use of chemical pesticides to control weeds and nematodes. Farmers must find alternative ways to control this weed problem.

Since most of these Caribbean islands do not have Research stations, the Banana Farmers Association, joined with a team from the University of the West Indies and representative farmers to engage in Participatory Research to test several alternative non-chemical approaches. Unlike previous attempts, this research was to be done on farmers’ fields.

In the first stage, some 36 farmers from across the island of St. Vincent, West Indies, participated in a 3-day Farmer Participatory Training Workshop where they learnt to carry out experiments on their farms in such a manner that results and conclusions could withstand the scrutiny of other farmers, not only in St. Vincent, but in the wider Caribbean region. They learnt about treatments, controls. Experimental plots, replication, randomization, sampling, data collection and record keeping. They also learnt about the importance of group work. Only participatory techniques, most based on experiential learning principles, were used at the workshop.

In the second phase, some 30 farmers (out of the 36) established 10m x 10m plots on their farms (average size of 1 Ha.) for treatments and controls. Farmers tested one or two treatments out of six treatments that were pre-evaluated at the workshop and selected by them for testing. For six weeks they gathered weed data using a quadrat and kept records. A monitoring visit was made by the team of specialists from the University midway into the field exercises. This was to assist with solving any problems farmers were having, as well as to encourage them to continue as experimenters.

The results showed that one of the treatments, a cover crop, Desmodium sp, showed tremendous potential as a control for the watergrass. A video was done of the process to develop interest among other farmers about the process and benefits of Farmer Participatory Research.

Farmers embraced this method of solving their own problems. Based on information received, the regional Banana Farmers Association has asked for the process to be replicated in another island and this is to be done in early 2006 in St. Lucia.

Several lessons were learnt: that the experimenting farmers (not their spouses) should come to the workshop; the absolute need for a facilitator to visit farmers weekly to solve any immediate problems; the need to be regular with data collection and to precisely guard data collected.

In times of dwindling Research funding and less Extension support in the region, farmers empowered to conduct research on their farms is a viable alternative to solving farm related problems, not only in Bananas, but other crops and livestock production as well.