

## **PARTICIPATORY INTERVENTIONS FOR ON FARM CONSERVATION OF MAIZE DIVERSITY IN THE CENTRAL VALLEYS OF OAXACA, MEXICO**

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The goal of this project is to determine whether it is possible to improve maize productivity while maintaining or enhancing genetic diversity. Maize productivity was broadly defined in terms of yield, stability, and other characteristics of interest to farmers. The project conducted and compared different participatory interventions with small-scale farmers in six communities in the Central Valleys of Oaxaca Mexico. Through the project, farmers gained access to the diversity of maize landraces present in the region, were trained in seed selection and management techniques, and learned principles to assist them in maintaining the characteristics of landraces they value. This project is divided into three components: 1) diagnosis, 2) interventions, and 3) impact assessment. The diagnosis included a collection of samples of landraces representative of the maize diversity present in this region; their agronomic evaluation in scientist-designed, but farmer-managed trials; a participatory exercise to identify a subset of landraces from those collected that were the most likely to be valuable to farmers; and a baseline survey. The interventions included access to the subset of landraces identified and training. The former through demonstration plots and field days, during which participants could purchase seed of any landrace of the subset that they wished. The latter through five training sessions, starting with a open discussion of their knowledge about maize reproduction and their perceptions of maize improvement. Additional sessions focused on teaching basic principles of maize reproduction, seed selection in the field and in the house (including hands-on exercises in the field), and seed and grain storage principles and techniques. The impact assessment component includes the baseline survey (described above) and the monitoring a sample of farmers who participated in each of the interventions. The monitoring consists of systematic interviews with this sample of farmers every year regarding their participation, their perceptions of the advantages and disadvantages of their participation, and collection of samples of the maize landraces purchased.