

# **Participatory Plant Breeding and Household Sustainability, a case study of Red Maíz Criollo, Chiapas, Mexico**

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The Red Maíz Criollo was established in 2003 by the confluence of two processes. First, a participatory plant breeding program of native Maize and Beans initiated by different social actors and institutions; second, the initiative of diverse maize producers and social organizations to make an influence on the agricultural public policies, specifically the federal program “Programa de Reversión Productiva” (PROMAF) and state government with the “Maíz Solidario” Program. Further, trainings were provided to producers for the enhancement of the milpa system and seeds conservation in situ, based on the experience of participatory plant breeding from years before. This network was a common ground in the Altos region, Chiapas, Mexico, utilized for farmer organizations working in different sectors to discuss and present their ideas on a common interest, the milpa system.

Rural villagers continue to support their traditional social and productive organizations with their own resources, in spite of the high financial cost, is evidence of the currency of their unique vision of society, and their commitment to resist neo-liberal impositions (Barkin, 2002). In this sense, taking into consideration the limited agricultural options of the campesinos and their vulnerability context it is relevant to analyze how the the milpa is supporting the household trying to achieve food security but also how it behaves in terms of sustainability; it is important for the system not only to provide the food needs but to ensure the development of the household for better life conditions.

## Zielsetzung/Forschungsfragen – Aims/Research questions

- What are the reasons from the members of the Red Maíz Criollo to continue using the traditional milpa system with participatory plant breeding techniques instead of the modern maize production proposed by the government?
- How the campesinos decided to use and adopt the techniques provided by the Red Maíz Criollo?
  - Are the campesinos still using the techniques provided by the training?
- Is the milpa system with participatory plant breeding techniques leaning towards food security and sustainability of their household?
  - What are the opportunities and difficulties of the agricultural strategy?

## Vorgehensweise – Methods

A case study approach (Yin, 2003) based on qualitative interviews is proposed to guide the research. The case study, aiming to describe and analyze the network establishment taking as starting point 2003 where the participatory plant breeding activities started in the Altos de Chiapas Region, activities they worked with the organization members, working methodology based on the participatory plant breeding techniques, principles of the network, opportunities to work in the region, challenges to work in the region and organizational processes since the establishment.

Further, the sustainable livelihoods framework will be use to have an insightful picture of a members' household; twelve households belonging to twelve representatives of the Red Maíz Criollo are selected for the opportunity to describe and analyze the activities of the network community leaders. Moreover, a comparison between the households is proposed to identify similarities, differences, opportunities and challenges using the respective strategies to develop the household in a sustainable way.

Studiengang – Study programme	M.Sc. Organic Agriculture and Food Systems
Laufzeit – Lifetime	10/2016 - 04/2017
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