

What can we learn from farmers' crop diversity management strategies to improve conservation measures? – Introduction to the workshop theme. (Oral Presentation)

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This presentation will introduce the theme of the workshop by briefly reviewing examples of studies of traditional management of crop genetic diversity and established strategies to promote *in-situ* conservation. In the hopes of generating discussion, questions will be raised about whether our methods of research are telling us what we need to know to protect crop diversity, whether existing conservation strategies have been effective, and how their effectiveness can be assessed. I will include some observations from ongoing research on the diversity of the Andean tuber crop “oca,” *Oxalis tuberosa*, as illustrations of some of the factors that are affecting farmers' maintenance of diversity and of the challenges of making the results of research into effective tools for conservation.

Although “traditional” crop management has never been static, current rapid cultural and economic changes, in combination with other factors, are accelerating changes in farmers' livelihoods and in how (or whether) they cultivate diverse crops. *In-situ* conservation is touted as allowing continued evolution of crop diversity, but few studies have assessed evolutionary factors in traditional management of crops. How can *in-situ* conservation allow for continued dynamic change and evolution, yet prevent loss of diversity due to the livelihood shifts in rural populations? Is geneflow among crop populations introducing new diversity, or are introductions of novel crops and cultivars swamping out existing diversity? As farmers move from subsistence to market-driven farming, or from agriculture to livestock raising, what is the role of *in-situ* conservation? What existing programs have moved beyond study and theoretical discussion of complementary *in-situ* and *ex-situ* conservation, to actual practice, and what have been the results?

We hope that the “audience” will come prepared to join the discussion of these topics in the time following the prepared presentations.

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