

# **DYNAMICS IN THE TRADITIONAL MANAGEMENT OF NATURAL RESOURCES BY SMALL PEASANT FARMERS IN THE ALPINE MOUNTAINS OF EASTERN TYROL/AUSTRIA: ITS CONSEQUENCES ON CULTIVATION AND USE OF PLANT SPECIES**

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Alpine farmers have formed a landscape which is the result of continuous adaptive management of natural resources over centuries.

Until the 1960s the main parts of the managed mosaic of a typical farm in Eastern Tyrol consisted of: a) the herbal garden; b) a pasture with fruit trees; c) plots close to the homestead for vegetables, fibre crops, cereals for human consumption and fodder, d) forests used for timber, animal fodder, bedding and fire wood; e) hunting and gathering of berries, mushrooms and medical plants; and f) large alpine pastures and hay meadows in higher regions at distances of >5 km from the farm. A high diversity of animal species was kept at the farm. Main purpose of all agricultural activities had been securing subsistence

Today farmers work mainly for cash income by breeding cattle for milk and meat. Some traditional techniques of plant management for farmers' subsistence are still common: Herbal gardens (a) developed into highly diverse homegardens with vegetables, herbs and ornamentals. Traditional management of fruit trees (b) is still alive. Gathering of mushrooms, medical herbs or berries (e) is reduced in extent, but still usual. In contrast, areas for cereals, fibre crops and vegetables (c), except potatoes, were abandoned in favour of pastures and hay meadows. Fodder or bedding based on forest species (d) has disappeared. Management of higher alpine pastures and hay meadows (f) has changed significantly. As a consequence appearance of landscape has changed and agrobiodiversity is eroding, except in homegardens.

National policies and subsidies address directly and indirectly in situ conservation of agrobiodiversity. These policies have to be complemented by respecting, that, for farmers, conservation of agrobiodiversity is not only an economic issue, but a phenomena embedded in local culture, worldview and beliefs. To be successful, these aspects have to be addressed also in a dynamic concept of in-situ conservation of biological AND cultural diversity.