In situ Conservation of Crop Wild Relatives

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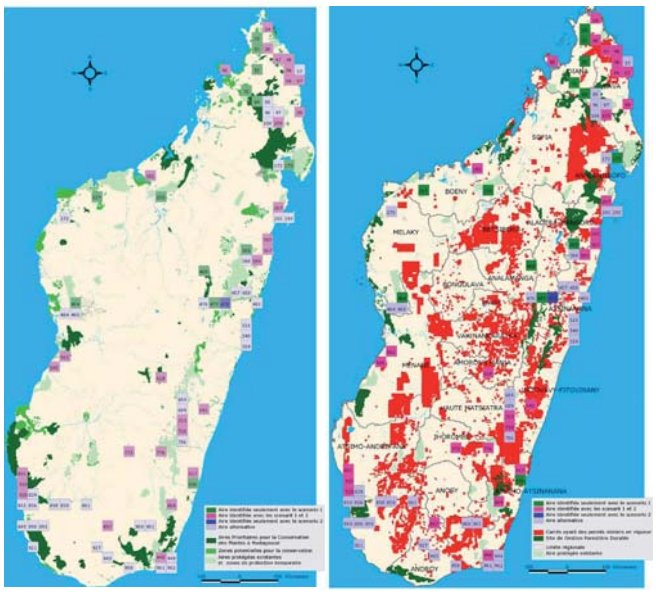
Conservation Actions

Countries are prioritizing taxa and areas for conservation actions based on analyses of species distribution and threats.

Armenia: Wheat*, beet*, pear, high mountain pea
Bolivia: Potato*, quinoa, peanut, beans*, cassava*, sweet potato*, chili pepper, pineapple, custard apple, papaya, mora, tree tomato, cocoa, cayu, palm
Madagascar: Rice*, banana*, yam*, vanilla, coffee
Sri Lanka: Rice*, banana*, cinnamon, cowpea*, pepper
Uzbekistan: Apple*, barley*, almond, walnut, pistachio, onion
**Crops included in Annex 1 of the International Treaty on Plant Genetic Resources for Food and Agriculture.*



Above left, Madagascar's priority areas for conserving CWR
Above right, Madagascar's analysis of threats.

Crop Wild Relatives (CWR) are used for crop improvement, and by local communities for food and income.

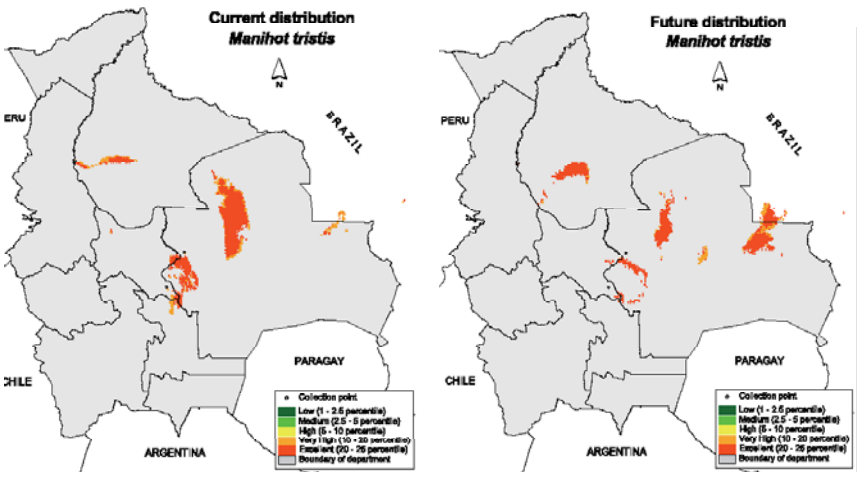
Natural populations of CWR are at risk mainly due to habitat loss and climate change.

The UNEP/GEF supported global project, *"In situ conservation of crop wild relatives through enhanced information management and field application"* aims to conserve CWR in the wild.

The project brings together five countries: Armenia, Bolivia, Madagascar, Sri Lanka and Uzbekistan. All are centers of diversity for CWR and are among the world's biodiversity hotspots.

Climate Change

Climate change is a threat to many important species of crop wild relatives.



Above, Changes in potential distribution changes of wild cassava (*manihot tristis*) over ten years in Bolivia.
Right, Selling cassava in Madagascar.

Photo: A. Lane, Bioversity International

Breeding Studies

Wild species are being evaluated for their potential to improve the tolerance of their crop relatives to biotic and abiotic stresses.

Country	Wild relative of...	Desirable Traits
Armenia	Wheat and pear	Resistance to adverse environmental conditions
Bolivia	Peanut Quinoa, Cañahua	Pest and diseases resistance of selected species from three genera Nutritious properties of Quinoa and Cañahua
Madagascar	Coffee Rice Yam	No or low caffeine, high content of Chlorogenic acid Resistance to Rice yellow mottle virus (RYMW) Potential for domestication
Sri Lanka	Rice	Resistance to biotic and abiotic stresses
Uzbekistan	Apple, Pistachio	Capacity to resist extreme environmental conditions

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