Conserving plant genetic diversity crucial for future food security – UN



Poor farmers need access to improved seeds

26 October 2010 – The world's food security could be threatened by the failure to conserve the wild plant species that are genetically related to the crops grown by mankind for food, the United Nations Food and Agriculture Organization (FAO) said in a new report released today.

In the 350-page report, FAO warns that the loss of biodiversity will have a major impact on the ability of humankind to feed itself in the future, with inhabitants of poorest regions of the world experiencing more shortages.

The report – "State of the World's Plant Genetic Resources for Food and Agriculture" – covers topics ranging from gene bank collections to the effects of climate change on crop diversity, and is intended to highlight what is being done to protect biodiversity in food crops.

Genetic information held in certain crop varieties is crucial to the development of heat, drought, salinity, pests and diseases-resistant, fast-growing, high-yielding new varieties, necessary to reduce food insecurity in the face of climate change.

"Increasing the sustainable use of plant diversity could be the main key for addressing risks to genetic resources for agriculture," **said** Jacques Diouf, the FAO Director-General.

"There are thousands of crop wild relatives that still need to be collected, studied and documented because they hold genetic secrets that enable them to resist heat, droughts, salinity, floods and pests," he added.

According to the report, 50 per cent of the increase in crop yields in recent years has come from new seed varieties. Irrigation and fertilizer account for the other 50 per cent. A recent example is the fast-maturing New Rice for Africa (**NERICA**) that has transformed local economies in several parts of Africa.

The study calls for action, especially generating farmers' interest, and building capacities to conserve and use the genetic biodiversity that still exists.

It does not attempt to quantify biodiversity loss, but points out that empirical evidence shows continued extinction of crop biodiversity, reducing the diversity of traditional food crops that survived the past century.

FAO estimates that 75 per cent of crop diversity was lost between 1900 and 2000. A recent study predicts that as much as 22 per cent of the wild relatives of important food crops of peanut, potato and beans will disappear by 2055 because of a changing climate.

On a more positive note, the report states that over the past 12 years, there has been an increase in awareness of the importance of protecting and utilizing the genetic diversity of food crops. Gene banks have increased in both size and the number.

There are now some 1,750 gene banks worldwide, with about 130 of them each holding more than 10,000 plant genes. In 2008, the ultimate back-up of global crop diversity, the Svalbald Global Seed Vault, was opened in Norway.

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