



**Observance
On the occasion of
WORLD FOOD DAY**

Address by the FAO Director-General

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Address by the FAO Director-General
World Food Day Ceremony at the United Nations

Theme: "Biodiversity for Food Security"

New York, 18 October 2004

Mr. Steven C. Rockefeller, Managing Director, Deutsche Bank, New York
Your Excellency, Mr. Jean Ping, President of the 59th Session of the General Assembly
Your Excellency, Ms. Marjatta Rasi, President of ECOSOC
Ms. Louise Frechette, UN Deputy Secretary-General

Excellencies, Distinguished Guests,
Ladies and Gentlemen,

Today, many people around the world celebrate World Food Day. But many others – the 842 million people who do not have enough food to eat – have nothing to celebrate. Progress has been too slow in the fight against hunger, but the goals of the World Food Summit and the Millennium Development of halving the number of people suffering from hunger by the year 2015 can still be reached. Our planet abounds with richness and this great diversity is key to ending hunger. This is why the theme “Biodiversity for Food Security” has been chosen for this year’s World Food Day.

In selecting this theme, the aim is not only to acknowledge the importance of biodiversity to food security but also to raise an alarm. FAO estimates that about three-quarters of the varietal genetic diversity of agricultural crops have been lost over the last century. Just twelve crops and fourteen animal species now provide most of the world’s food. This erosion of agricultural biodiversity severely compromises global food security.

Genetic resources provide the raw material for breeding new crop varieties and animals. Fewer genetic resources mean fewer opportunities for growth and innovation in agriculture. However, as the world population increases, agricultural production must evolve and increase to keep pace with demand.

Furthermore, as agricultural biodiversity declines, the food supply becomes more vulnerable. Agriculture becomes less able to adapt to environmental changes, such as global warming or the appearance of new pests and diseases. No one can predict the future. No one knows which traits from which species may hold the key to tomorrow's agricultural breakthrough. For this reason, we must preserve as much as we can of the world's agricultural biodiversity.

Over the course of thousands of years, farmers have carefully selected plants and animals that are best suited for their communities' specific environmental, cultural and food needs. By recognizing the importance of biodiversity to food security, tribute must be paid to the world's farmers and breeders. It is thanks to their ingenuity and skill that the world is able to enjoy this wealth of agricultural diversity.

Farmers and breeders were successful because they had access to a wide range of seeds and breeds. Since it was first practised, agriculture has been based on the exchange of genetic materials, not on the exclusivity of use. Every region in the world has contributed to the current storehouse of biodiversity. Barley and wheat come from the Near East, rice from Southeast Asia, the potato from the Andes, millet and sorghum from Africa, and maize from Central America. Thus, for everyone, food security depends on agricultural products that in a large measure originated elsewhere. To achieve global food security, the world's genetic resources must also remain available to all.

Today's farmers and breeders remain the stewards of agricultural biodiversity. Even though they may be poor and often hungry in developing countries, they are making an essential contribution to food security by protecting and increasing the world's stock of genetic resources. They may have few assets, but they have a wealth of knowledge about local plants and animals, including medicinal plants, which are often the only medicines affordable for them.

Many rural families in developing countries, especially those living in remote areas, cannot find a sufficient variety of nutritious food in their local markets or are simply too poor to purchase them. They must therefore make the best use of indigenous plant varieties and animal breeds for their survival.

This biodiversity allows them to obtain resources even from marginal lands and ensure a

minimum level of food production when faced with extremely harsh conditions. In this regard, the fundamental role played by women farmers should not be overlooked. In much of the developing world, the conservation and use of plant genetic resources have always been and remain the responsibility of women.

Preserving the world's agricultural biodiversity needs to be viewed as a joint effort involving farmers, commercial plant breeders and the scientific community. Unfortunately, in the past, the contributions made by farmers in the developing world towards preserving agricultural biodiversity have not been properly appreciated. When the genetic resources of the developing world were used for commercial crop and animal breeding in industrialized countries, the developing countries and their farmers received no financial benefits for their contribution.

Today, however, the rights of these farmers have been recognized and articulated. The concept of Farmers' Rights has been incorporated into the Treaty on Plant Genetic Resources for Food and Agriculture, which entered into force on 29 June this year. The Treaty is a binding international instrument that:

- secures the conservation and sustainable utilization of the world's agricultural genetic diversity;
- guarantees that farmers and breeders have access to the genetic materials they need; and
- ensures that farmers receive a fair and equitable share of the benefits derived from their work.

Despite the importance of local crop varieties for food security in many developing countries, the drive for increased production and profit has created a reliance on a limited number of high-yielding varieties and breeds. As a result, traditional diversified farming systems have been abandoned. In many communities, this has led not just to a loss of biodiversity but also to a loss of cultural identity. Agricultural biodiversity is intricately linked to cultural diversity. By protecting one, we help protect the other.

National research programmes and development projects should support crop and plant diversity. In this regard, FAO and the International Plant Genetic Resources Institute are mobilizing public and private donors to establish the Global Crop Diversity Trust. This fund will assist developing countries to strengthen their capacity to preserve agricultural

biodiversity and maintain comprehensive gene banks where genetic resources can be kept safe for the future.

In addition to plants, livestock is making an increasingly significant contribution to food security and rural development. Yet, animal genetic diversity is also rapidly eroding. Of the 6 300 known animal breeds, 1 350 are endangered or already extinct. FAO is currently working to publish the first report on the State of the World's Animal Genetic Resources.

Governments contributing to the report have become more aware about the value of animal genetic resources. Many have begun to take steps to conserve and better utilize their indigenous breeds of farm animals.

Forests are among the world's most important repositories of biological diversity. Tropical forests alone contain around half of all known vertebrate species, 60 percent of plant species and possibly 90 percent of the world's total species. However, the world forest cover continues to decline. Biodiversity is central to sustaining forest communities. Forests are not simply sources for commercial timber. They also provide food for families and livestock as well as life-sustaining energy in the form of fuelwood. In addition, the products derived from trees and shrubs, such as essential oils, gums, resins and latex, and medicines and pharmaceuticals, contribute to a diversified local economy.

However, in spite of the high number of tree species in use, less than 500 have been systematically studied for their utility and potential. FAO is actively working with its Members to assess the global state of genetic diversity in the world's forests and find solutions to the threats they face.

The world's oceans, lakes and rivers are teeming with life and this aquatic biodiversity also plays a vital role in food security and rural livelihoods. However, it is being threatened by over-fishing, environmentally damaging fishing practices, the introduction of alien species and habitat destruction. The FAO Code of Conduct for Responsible Fisheries sets out principles for responsible conservation, management and development of living aquatic resources. In addition, the Species Identification and Data Programme contributes to improving knowledge on aquatic biodiversity and provides tools for proper species identification.

Preserving biodiversity means understanding and protecting many different types of habitats and ecosystems, including those which enable the activity of countless, often invisible creatures. Insects, bacteria, microbes, fungi and many other types of organisms, associated together in complex ways, are indispensable for farmers to grow food.

One way traditionally used by farmers to enhance biodiversity is by applying animal manure to their fields. Animals provide this organic fertilizer free of charge. Diversified agricultural systems that combine crop cultivation and livestock management can thus be an efficient way of keeping the local environment healthy and productive.

Pollination is another aspect of food production that depends on local biodiversity. Bees and other insects, as well as birds and bats, all help to pollinate fruits and plant crops with positive effects on their yield. FAO places the global value of pollination provided by these animals at over US\$50 billion annually. The International Pollinator Initiative launched by the Organization aims to encourage the use of inexpensive and effective natural pollinating animal species.

Protecting biodiversity can also support environmentally sound pest control. In agriculture, insect pests are inevitable. But, in most fields, over 90 percent of these pests are killed by beneficial species. For years, FAO has promoted integrated pest control programmes as a way of reducing the use of chemical pesticide. Throughout Asia, rice cultivation has benefited from these programmes. Yields have increased and pesticide use has declined. In Indonesia, natural pest control has replaced more than US\$100 million per year in pesticides and rice yields have increased by nearly 20 percent. The success of integrated pest management is not limited to rice production in Asia. Over the past 20 years, more than 50 countries have incorporated some forms of natural pest control into their domestic agricultural policies.

Food producers are not the only ones who recognize the value of biodiversity. Increasingly, consumers are also demanding more diverse produce. There are many examples of producers reviving threatened or neglected crops in response to consumer demand. In southern Asia, to satisfy consumer requests for a wider choice of rice varieties and at the same time improve the resilience of their rice fields, grassroots farmers' organizations have rescued dozens of traditional rice varieties and developed new local selections. The production of quinoa, a

nutritious but long-neglected indigenous grain from the Andes, has made a comeback thanks in large part to consumer demand for indigenous foods. In Europe, consumers are fueling a resurgence in the cultivation of traditional local varieties of fruits and vegetables.

Clearly, there are ways of matching foods crops that occupy a unique biological niche with a corresponding market niche. To take advantage of such opportunities, developing countries need support in improving their food processing and marketing systems.

Today we are celebrating our planet's tremendous wealth of biodiversity and the promise it holds for eliminating world hunger. Harnessing the power of biodiversity can indeed significantly and sustainably increase food production. For this to happen requires the commitment of everyone. As in nature, our strength lies in our diversity.

Thank you.