

HarvestPlus: Breedings Crops for Better Nutrition



A new breed of crops is being developed to help reduce malnutrition even in remote rural populations—crops such as rice, wheat, maize, and sweet potato packed with more vitamins and minerals. These “biofortified”™ staples are one of the most promising new tools to fight malnutrition.

Over three billion people in developing countries suffer micronutrient malnutrition, often because they lack money to buy enough meat, fish, fruits, legumes, and vegetables, which are rich sources of micronutrients. The introduction of biofortified crops—varieties selected and/or bred for increased mineral and vitamin content—is a sustainable, low-cost way to reach people with poor access to formal markets and health care systems.

A major advantage of biofortification is that it does not necessarily require a change in the behavior of farmers or consumers. Changes in mineral content will not alter the appearance, taste, texture, or cooking qualities of modern varieties of crops that are already widely produced and consumed by poor households.

HarvestPlus is an interdisciplinary, global alliance of research and implementing institutions that will develop these nutrient-rich crop varieties, assess their impact on human nutrition, and distribute them to the people most at risk of being micronutrient deficient.

Initial efforts focus on six staple crops for which feasibility studies have been completed: beans, cassava, maize, rice, sweet potatoes, and wheat. The project will also examine the potential for nutritionally enhanced bananas/plantains, barley, cowpeas, groundnuts, lentils, millet, pigeon peas, potatoes, sorghum, and yams.

Partners include national agricultural research systems in developing countries; International Center for Tropical Agriculture (CIAT); International Maize and Wheat Improvement Center (CIMMYT); International Potato Center (CIP); International Center for Agricultural Research in the Dry Areas (ICARDA); International Crops Research Institute for the Semi-Arid Tropics (ICRISAT); International Food Policy Research Institute (IFPRI); International Institute of Tropical Agriculture (IITA); International Rice Research Institute (IRRI); departments of human nutrition in developing- and developed-country universities; CSOs; University of Adelaide; University of Freiburg; Michigan State University; Plant, Soil, and Nutrition Laboratory/United States Department of Agriculture, Agricultural Research Service (USDA-ARS); Children’s Nutrition Research Center Baylor University.

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HarvestPlus is a global alliance of research institutions and implementing agencies that have come together to breed and disseminate crops for better nutrition. It is coordinated by the International Center for Tropical Agriculture (CIAT) and the International Food Policy Research Institute (IFPRI). HarvestPlus is an initiative of the Consultative Group on International Agricultural Research (CGIAR).

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