

Why vegetables?

A strong, thriving vegetable sector is vital for human and economic development. Worldwide, the production of vegetables has doubled over the past 25 years. Vegetables are high-value crops that provide an important source of income for poor rural and urban households and are the best means for overcoming many micronutrient deficiencies.

Vegetables can:

- Alleviate poverty by creating new jobs and new sources of income for farmers and landless laborers
- Improve health by providing essential micronutrients lacking in the diets of poor people
- Enhance learning and working capacities of adults and children through improved diets and health
- Improve the sustainability of food production practices by diversifying cropping systems

Research & Development

The research and development work at the Center focuses on developing improved varieties of vegetables and safe production practices, reducing postharvest losses, and improving the nutritional value of vegetables.

The Center's crop portfolio includes five groups of globally important vegetables:

- Solanaceous crops: tomato, sweet pepper, chili, eggplant
- **Bulb alliums:** onions, shallots, garlic
- **Crucifers:** cabbage, Chinese cabbage
- **Cucurbits:** cucumbers, pumpkins
- **Legumes:** mungbean, vegetable soybean

The Center also maintains a collection of more than 10,000 **traditional vegetables**, mainly from Asia and Africa. Research and development improves lines, management, and marketing of these hardy and often nutritious crops, which are particularly important for the poorest members of a community.

Our 4 Global Themes

The Center's four global research themes cover collecting vegetable germplasm, producing improved lines, improving production, developing marketing and postharvest strategies, and enhancing the nutritional value of vegetables:

- **Germplasm:** Germplasm conservation, evaluation, and gene discovery
- **Breeding:** Genetic enhancement and varietal development of vegetables
- **Production:** Seed and safe vegetable production systems
- **Consumption:** Food security, diet diversification, and human health; postharvest management and market opportunities

Working for Impact

The world's largest collection of vegetable germplasm

The Center maintains the largest and most diverse public collection of vegetable germplasm in the world. It contains more than 61,000 accessions of 440 different species collected from 156 countries. Since its founding, the Center has distributed more than 590,000 seed samples to researchers in 200 countries. This has led to the release of hundreds of varieties that are planted on millions of hectares in the developing world today.

New varieties and partnering with the private sector

Diseases are particularly important causes of crop loss in the tropics where most of the world's poor live. The Center has made breeding breakthroughs to improve the yield and disease resistance of crops such as tomato, pepper, chili, onion, cabbage, and cucurbits. We work in close partnership with the private seed sector to produce and distribute seed of these improved varieties to millions of smallholder farmers that would otherwise not have access to high quality seed.

Training in improved crop management

Vegetable production is knowledge intensive, and the Center's research develops improved crop management techniques to reduce pesticide misuse and increase the efficiency of water and fertilizer use. This leads to higher yields and safer production. Through extensive training courses usually held in our regional offices, hundreds of farmers, extensionists, and researchers are able to develop new skills in improved vegetable production technologies each year.



Reducing postharvest losses

Most vegetables are highly perishable and postharvest losses typically account for up to 50% of the total crop yield, reducing the benefits for everyone along the value chain—farmers, traders, processors, and consumers. We work with all stakeholders to develop new handling, storage, and processing technologies to provide more income and better quality produce at fair prices for consumers.

Producing and promoting safe and nutritious vegetables

Vegetables are the best means for overcoming deficiencies of micronutrients such as vitamin A, which now affect almost four times as many people as hunger. In most countries, whether rich or poor, vegetable consumption is well below the recommended minimum. The Center selects vegetable lines for improved nutritional value, screening for micronutrients as well as antioxidants and other anticancer chemicals. Our low input research program aims to reduce chemical contamination of vegetables, and our promotional activities encourage vegetable consumption.



Access services and publications through our website:

avrdc.org

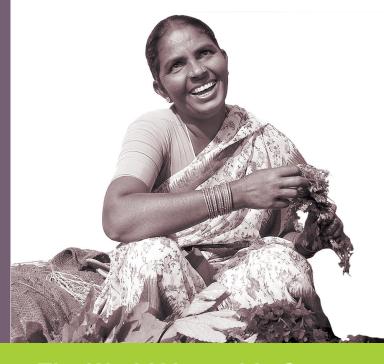
About the Center

AVRDC - The World Vegetable Center is the world's leading international, nonprofit institute for vegetable research and development. The Center develops vegetable lines and other technologies to increase vegetable production and consumption in developing countries. This leads to more income opportunities and healthier diets for the poor.

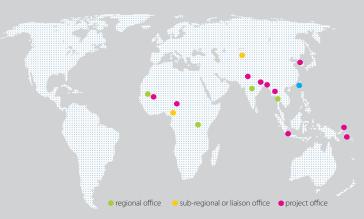
The Center receives funding from many governments including Australia, Germany, Japan, Korea, Philippines, Taiwan, Thailand, United Kingdom, and the United States as well as from institutions, foundations, and the private sector including the European Union, Asia & Pacific Seed Association, Global Crop Diversity Trust, Kilimo Trust, Sir Ratan Tata Trust, and the International Fund for Agricultural Development.

AVRDC - The World Vegetable Center seeks to form alliances of partners with complementary expertise. It is a founding member of the Association of International Research and Development Centers for Agriculture (AIRCA), and closely cooperates in several areas with institutions supported by the CGIAR, a global agricultural research partnership.





The World Vegetable Center



Headquartered in Taiwan, AVRDC - The World Vegetable Center has regional offices in India, Mali, Tanzania, and Thailand, with project offices and staff located in many developing countries.

AVRDC - The World Vegetable Center Headquarters

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Our mission:

To alleviate poverty and malnutrition in the developing world through the increased production and consumption of nutritious, health-promoting vegetables.

