



*Prosperity for the Poor,
Health for All*

Why vegetables?

A strong and 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 can play an important role in helping achieve the Millennium Development Goals. Vegetables 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 micronutrients that are essential, but 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.

Our Research & Development

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

The Center's crop portfolio focuses on four groups of globally important vegetables and indigenous vegetables:

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

The Center maintains a collection of over 10,000 indigenous vegetables, mainly from Asia and Africa. Research and development focuses on improving lines, management and the marketing of these hardy and often nutritious crops which are particularly important for the poorest members of the community.

Our 5 global themes

The Center's five global research themes cover the collecting of vegetable germplasm through to producing varieties, improving production and marketing to 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
- **Marketing:** Postharvest management and market opportunities
- **Nutrition:** Food Security, diet diversification, and human health

Some Recent Impacts

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 56,000 accessions of 334 different species collected from over 150 countries. Since its founding, the Center has distributed more than 300,000 seed samples to researchers in 180 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 yields 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 reach 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, over 1000 farmers, extensionists and researchers have been 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 - from farmers to traders, processors, and consumers. We work with all players to develop new handling, storage, and processing technologies to provide more incomes and better quality products 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 anti-cancer chemicals. Its low input research program aims to reduce chemical contamination of vegetables, and its promotion activities encourage vegetable consumption.



Services and publications from AVRDC - The World Vegetable Center can be accessed at www.avrdc.org

About the Center

AVRDC - The World Vegetable Center is the world's leading international, not-for-profit institute for vegetable research and development. The Center develops vegetable lines and other technologies that increase vegetable production and consumption in developing countries. This leads to more income opportunities and healthier diets for the poor.

AVRDC - The World Vegetable Center receives funding from many governments including those of Australia, France, Germany, Japan, Korea, Philippines, Switzerland, Taiwan, Thailand, United Kingdom, and the United States as well as from institutions, foundations, and the private sector including the Asian Development Bank, Rockefeller Foundation, Bill & Melinda Gates Foundation, Asia & Pacific Seed Association, Farm Africa, and the Organic Center for Education and Promotion.

AVRDC - The World Vegetable Center seeks to form alliances of partners with complementary expertise. The Center is a co-initiator of the Global Horticulture Initiative (www.globalhort.org) that involves a network of international and local organizations. There is also close cooperation with the centers supported by the Consultative Group on International Agricultural Research (CGIAR) in several areas.



The World Vegetable Center



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

AVRDC - The World Vegetable Center

Headquarters

P.O. Box 42, Shanhua
 Tainan 74199, Taiwan

T +886 6 5837801

F +886 6 5830009

E info@worldveg.org

I www.avrdc.org

AVRDC - The World Vegetable Center's mission:

To alleviate poverty and malnutrition in the developing world through the increased production and consumption of safe vegetables.

