

### BUILDING IMPACT A plan for renewal



For more than 40 years, the health and livelihoods of small-scale farmers, their families, and consumers in developing countries have been enhanced by the research, training, and promotion activities of the World Vegetable Center.

Reinvigorating the Center's research infrastructure now will ensure this vital work can continue for decades to come. The **World Vegetable Center**, an international nonprofit research institute, strives to provide healthier, more nutritious diets and raise incomes in poor rural and urban households by breeding improved vegetable lines, developing and promoting safe production practices, reducing postharvest losses, and improving the nutritional value of vegetables.

Vegetables create new jobs and new sources of income for farmers and landless laborers, improve health by providing essential micronutrients lacking in diets, enhance learning and working capacities of adults and children through improved diets and health, and improve the sustainability of food production practices by diversifying cropping systems.



### Room to **GROW**

The World Vegetable Center's headquarters campus, located in Tainan, Taiwan, was dedicated in October 1973. Although building additions, refurbishments and improvements have been undertaken over the past four decades, many of the original buildings—including the main laboratory building are in urgent need of renewal.

Modern laboratories and facilities will ensure WorldVeg can continue to be the leading international center for vegetable science and breeding, delivering high impact outcomes in the development of vegetable crops and cultivation systems. The Infrastructure Modernization Master Plan identifies a number of specific activity zones to provide a framework for the rationalization, integration and transformation of the Center's research infrastructure, and to accommodate future refinements and expansion.

The Master Plan, aligned with the Center's new strategic and operational plans, proposes to enhance existing research capabilities and develop new research platforms to ensure WorldVeg is properly equipped to deliver high impact vegetable science and applications. Creation of modern res buildings a unique Ger world's larg

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a research capability precinct will co-locate earch laboratories with dedicated research support ad further enhance and strengthen the role of the bebank located on the campus, which houses the gest public-sector collection of vegetable seed.

ing, collaborator and partnership hub will create onal focal point where WorldVeg staff can romote and demonstrate the Center's contributions le research and cultivation. Activity zones devoted to research, training, administration, and social interaction engage a vibrant community of research professionals



# Look to the FUTURE

Now at 7.5 billion, the global population will continue to expand in the coming decades. Effective and sustainable production systems to produce safe, high quality and nutritious vegetable crops will be needed to feed and nourish people worldwide.

Modernization of the World Vegetable Center's aging research infrastructure will enhance the institute's leadership in vegetable research, and ensure its outputs will benefit farmers, their families and communities across the globe.

Renewal of infrastructure will:

• Support the Center's Strategic and Operational plans by ensuring the organization is equipped with the tools and capabilities to tackle emerging scientific, environmental and production challenges.

• Enhance the Center's visibility as the premier international research institution for high impact vegetable science and cultivation outputs.

• Capture efficiencies and create new research synergies to enable and promote collaboration internally and with international partners.

• Build on new and evolving research and technical support platforms and instrumentation to facilitate work in the dynamic disciplines of genomics, phenomics, and "big data" analytics.

• Create new fit-for-purpose buildings and facilities incorporating modern building design, workflow and efficiency principles. These will provide safer work environments for staff by meeting laboratory regulatory and compliance requirements.

• Consolidate and integrate research buildings and facilities for optimal use of resources, reduced operating costs, and a dynamic work environment that fosters and promotes staff and collaborator interactions.

## Space to **DISCOVER**

The **three-phase Master Plan** will allow WorldVeg to develop new research platforms and capabilities that build on the revolution in genomics, plant phenotyping and "big data" analytics.

#### PHASE ONE

Estimated cost: US\$11.8 million

- New 4000m2 fully equipped Laboratory Building to replace the existing outdated, noncompliant 40-year-old structure.
- Seed Extraction and Treatment Facility to support and streamline the processing of seed materials for research use, distribution, and ongoing maintenance of critical germplasm materials archived within the WorldVeg Genebank.
- **High Throughput Field Phenotyping Facilities** to accelerate the identification, selection and deployment of important traits for vegetable breeding.

#### **PHASE TWO**

Estimated cost: US\$7.8 million

- Quarantine Seed Health Facility and Quarantine Insectary Facilities/Dedicated Greenhouse to replace aging infrastructure and enhance biosecurity compliance and effective management of materials entering or leaving WorldVeg facilities.
- **Solar Farm / Sustainable Technologies** will ensure the Center uses natural resources in an efficient, sustainable manner.
- **Controlled Environment Phenotyping** to identify and select critical traits under controlled conditions for a range of crops.

#### PHASE THREE

Estimated cost: US\$2.8 million

• **Training and Research/Partner/Public Collaboration Hub** to provide facilities for delivery of national and international training programs and space to accommodate research and industry partners. The Hub will be a focal point for programs and activities promoting and demonstrating the Center's work and contributions to schools, university groups, farmers, government officials and the public.









### **OPPORTUNITY AWAITS**

With your generous support, this ambitious yet essential revitalization of the World Vegetable Center's research facilities can be realized for the benefit of people worldwide.

For further details on the Master Plan and opportunities for sponsorship, please contact:

Dr. Marco Wopereis Director General World Vegetable Center P.O. Box 42 Shanhua, Tainan 74199 TAIWAN marco.wopereis@worldveg.org

worldveg.org