

FACT SHEET

THE INTERNATIONAL POTATO CENTER (CIP) AND ITS WORK IN PERU AND THE WORLD



About CIP

The International Potato Center (CIP) was founded in 1971 as a research-for-development organization with a focus on potato, sweetpotato and Andean roots and tubers. Headquartered in Lima, Peru, CIP has a research presence in more than 20 countries in Africa, Asia and Latin America.

The Center delivers innovative science-based solutions to enhance access to affordable, nutritious food, foster inclusive, sustainable business and employment growth, and drive the climate resilience of root and tuber agrifood systems.

CIP is a CGIAR research center, a global research partnership for a food-secure future. CGIAR science is dedicated to reducing poverty, enhancing food and nutrition security, and improving natural resources and ecosystem services. Its research is carried out by 15 CGIAR centers in close collaboration with hundreds of partners, including national and regional research institutes, civil society organizations, academia, development organizations, and the private sector.

About the CIP Genebank

- **The CIP Genebank was established in 1971**; a collection of more than 22,000 accessions of potato, sweetpotato, and Andean roots and tubers, conserving genetic diversity, thanks to the material's invaluable genetic, physiological and biochemical attributes.
- **As of 2018, the Genebank conserves 4,954 accessions of cultivated potatoes**, including both landrace and improved varieties, along with accessions of 141 of potato wild relatives 3,683 accessions from breeding lines .
- **CIP also keeps a collection of more than 2,526 accessions of Andean root and tuber crops**: achira, ahípa, arracacha, maca, mashua, mauka, oca, ulluco, and yacon, and their wild relatives. The safekeeping of these genetic resources takes place both in-field, and using *in vitro* and cryopreservation techniques.
- **The Genebank shares** between 5,000 and 6,000 germplasm samples each year with scientists from around the world, helping to develop more nutritious, high yielding, and climate- resistant varieties.

CIP's global achievements

- **In 2016, three CIP scientists were awarded the World Food Prize** in recognition of their work using biofortified crops to boost nutrition.
- **More than 2 million of Africa and Asia's small farmers** have been able to increase their yields with quality potato seed and improved varieties from CIP laboratories.
- **As of mid-2019, the nutritional status of more than 5.9 million African and Asian households** has been enhanced through the development and distribution of vitamin A rich, orange-fleshed sweetpotato varieties.
- **In 2015, 25% of the area cultivated to potato in China** was planted with varieties bred by or related to CIP.
- **Also in China, the Cooperación 88 potato**, a variety produced by CIP with late blight resistance, generated, from 1996 to 2015, an estimated USD 2.8-3.7 billion in additional income for the farmers of Yunnan province.
- **In the last ten years, CIP and their partners have developed and released in Africa and Asia** more than 130 varieties of biofortified, orange-fleshed sweetpotato, rich in vitamin A, helping to improve the nutrition and income of more than five million households.

EACH YEAR THE CIP GENE BANK

shares between **5,000** and **6,000** germplasm samples with scientists around the world



AT LEAST 31% OF POTATO FARMLAND IN PERU

is planted with varieties developed by CIP





CIP'S achievements in Peru

- **At least 31% of potato producing households in Peru** (more than 202,600 farmers) used improved varieties from the CIP breeding program. These varieties produce an additional net yield of one ton per hectare, resulting in an average of 2,7 tons of additional potatoes sold by these households, and generating extra profits of USD 493 per farmer.
- **CIP's Genebank has reintroduced more than 6000** disease-free samples of native potatoes (a process known as repatriation) to the fields of 89 communities throughout the highlands.
- **Over the last 16 years, 410 native potato varieties** have been repatriated to the indigenous communities of the Potato Park in Cusco. Scientists have also repatriated between 60 and 360 native potato varieties to 25 more communities in the region.
- **Together with the National Institute for Agrarian Innovation (INIA)**, CIP has developed and released more than 34 improved potato varieties in the last 40 years. These varieties, which give higher yields for lower production costs, boost earnings for farmers and lessen the use of pesticides.
- **CIP has been developing potatoes** with high levels of iron and zinc, along with higher yielding disease-resistant crop varieties that can combat anemia and malnutrition in general. Together with the National Institute for Agrarian Innovation (INIA) and other partners, scientists are evaluating 30 of these clones in 10 locations throughout the country, in order to select the best ones for release in Peru.

About potato and its consumption in Peru

- Peru is Latin America's number one potato producer and ranks 14th in the world.
- Approximately 60% of the country's area planted to potato corresponds to improved varieties; and 40% to native varieties.
- According to a joint INIA/CIP study, 33% of potato varieties cultivated in Peru were bred by CIP; the study highlighted three improved varieties from the Center (Canchan, Amarilis and Unica) which occupied 27% of land cultivated.
- Potato production in Peru went from 1,36 million tons in 1950 to 5,1 million tons in 2018, up by 6.8% from the previous year (2017), when 4,7 million tons were produced.
- Harvested area in 2018 was 321,327 hectares; with benefits to around 711,313 families spread over 19 regions in the country.
- Puno is Peru's main potato producing region.
- The Gross Value of Production (GVP) of potato in 2017 represented 10.7% of the agricultural subsector, making it the country's second most important agricultural product.
- From 2010 to 2015, the total value of native potato exports grew from USD 821,000 to USD 2.5 million, mostly in the form of packaged flakes.
- The average Peruvian consumes approximately 85 kilos of potato each year.

4,954
POTATO
VARIETIES

safeguarded in the
CIP Genebank

