



#### Research

## Potato science for the poor



Pamela Anderson is Director General of the International Potato Center (CIP) in Peru. In March, CIP co-sponsored one of the flagship events of the International Year — a working conference in Cusco to develop a new research agenda for potato in the developing world.

# You say the potato can make a great contribution to achieving the UN's Millennium Development Goals. Why?

"First, because of the potato's importance for food security. Potatoes are the third most important food security crop in the world. In the developing world, there's been strong growth in potato production across all regions since 1990, especially in the low-income food-deficit countries. In Africa, the area under potatoes grew by 120% between 1994 and 2004, and we've seen growth of almost

50 percent in China in the past 10 years. Since 2005, more potatoes are being harvested in the developing world than in the industrialized world, and the area planted is showing the same trend."

#### How can potato science take best advantage of those trends?

"Potato science can be a significant vehicle for targeting the poor and hungry. At CIP, we have adopted a pro-poor research and development cycle, which starts by identifying areas where rates of poverty, hunger and maternal and child mortality are high. Then we overlay that data with our maps of potato production zones to see where our research can have the greatest impact. We also try to understand the larger sustainable livelihoods framework: what assets vulnerable communities have, what shocks they are vulnerable to, the institutional arrangements that determine their constraints and opportunities."

### What are the priority geographic areas for potato research today?

"We need to address three developing worlds: agriculture-based countries, transforming countries and urbanized countries. The agriculture-based countries are primarily in Africa and the challenge there is to boost productivity. World average potato production is around 15 tonnes per hectare,





**114** ★ International Year of the Potato 2008 New light on a hidden treasure

compared to 35 to 40 tonnes in Europe and North America. To increase productivity, research needs to provide breakthroughs in overcoming intractable problems, such as lack of clean seed potato, diseases such as late blight and viruses, and storage problems. The transforming countries are primarily in Asia, where increases in agricultural productivity have driven poverty reduction in countries like India and China. But even in China, we have a poverty belt of 23 million people, most of them in potato-producing counties, which is why China has named potatoes specifically as one of their vehicles out of poverty. India has also declared its intention to double potato output in the next 5 to 10 years, focusing on the poverty belt in the country's northeast."

### What about the third "developing world", the urbanized countries...

"A good example is our host country, Peru. Here we have 50 poverty pockets where more than 90% of the population lives in extreme poverty, and 35 of those areas are potato producers. Potato output here has almost doubled in the last 30 years, so the challenge is to find ways to convert increased productivity into income. With the Swiss Agency for Development and Cooperation, CIP has started an initiative called Papa Andina which uses innovative ways to connect small scale potato growers to urban markets, both domestic and international. That involves developing new products based on native potatoes, market information systems, integrated pest management and improved post-harvest management. Papa Andina has

been highly successful; one of its products is the *Tikapapa* brand of native potatoes, which links the poor producers in the highlands to the urban market in Lima. In 2007, the *Tikapapa* concept won the BBC-Newsweek-Shell World Challenge Award and a 2007 United Nations SEED [Supporting Entrepreneurs for Environment and Development] award. We are now looking at how to scale-out the approach to Africa and Asia."

# More than 100 of the world's leading potato scientists attended the Cusco conference. What did it achieve and what happens next?

"Our aim was to share their insights and the results of the latest research in the development of new strategies and approaches that are needed in each of those developing worlds. We have published a website on the conference, and will continue to share the outcomes with the international potato science community during the other international conferences being held throughout the International Year of the Potato. We're calling this the 'Cusco Challenge' – the challenge to formulate a research agenda that puts potato science at the service of the poor in order to make a more significant impact on poverty and hunger."