Peru allows GM food imports, and protests grow

"Queremos papa! Queremos maíz! Y que transgénicos se vayan del país!" Dozens of Peruvian farmers in ponchos and chullos chanted outside of the Municipality of Lima on Monday. "We want potatoes! We want corn! Transgenic crops out of the country!"

The farmers came from organizations that together form the Parque de la Papa in Cusco, a farming community of 6,000 people that represent six communities. They worry the introduction of genetically modified organisms (GMOs) will compromise the native species of Peru, including the giant white corn, purple corn and, of course, the potato.

Peruvian president Alan García and the Minister of Agriculture Rafael Quevedo signed a decree (Supreme Decree 003-2011) on April 15 to allow the import and planting of GMOs in the country. In 2008 the decree was written, subjected to public discussion and amended accordingly. Then the opposition from the Ministry of the Environment and its minister Antonio Brack asked for a moratorium on the approval of GMOs, which delayed the signing until this April 15.

If passed in Congress the decree would give the National Institute of Agricultural Innovation (INIA) the power of regulation, risk analysis and monitoring on applications for agro-GM field testing and production in Peru.

Lack of consensus among farmers, scientists, environmentalists and politicians has kept the country from establishing a prior biosecurity law. Quevedo says a moratorium would threaten trade agreements and jobs. Quevedo also stresses that modern biotechnology will increase the productivity of local crops and improve the issue of food security.

Brack, the Minister of the Environment, says Peru should continue on the path of exporting GM-free products, with an emphasis on increasing the amount of organic products.

Renowned chef Gastón Acurio and Lima mayor Susana Villarán have added volume to the voice in support of the moratorium. On Monday the mayor promised to establish an ordinance "to declare Lima a GM-free region." Already Cusco, Lambayeque, Huanuco, Ayacucho and San Martin have declared themselves free of GMOs. But GMOs have already made their way into Peru in the absence of a law keeping them out. Whether imported through food products or transmission by pollen, seed and other naturally occurring phenomena, Peru's concept of a true GM free island may not be possible.

**GM food in Peru without labels**

Gestión reported in April that a study by the Peruvian Association of Consumers and Users (ASPEC) tested 13 products purchased in major supermarkets and shops in Lima. Ten of the 13 showed the presence of GMOs. President of ASPEC Crisólogo Cáreres explained that although the ten products tested positive for the presence of GMOs, none of the products stated this on their labels.

"Research by ASPEC confirms something that Peruvians knew all along: GM foods are on the shelves of our markets and wineries, and consumers buy them and take them into their homes to eat without knowing it. Nobody tells us, no one says anything, which involves a clear violation of
our right to information," Cáceres told Gestión. Article 37 of the Code and Consumer Protection in Peru now states "Food that incorporates genetically modified components should indicate so on their labels."

Gestión reports the article was supposed to go into effect April 2 but opposition from the Ministry of Economy and Finance and the Ministry of Justice, among other groups, will make it hard to enforce for at least another year. "We have the right to choose and know what we eat," said Mariella Matos of Alma Zen, a Lima restaurant featuring organic and vegan food.

**Making sense of the science**

The word transgenic means that a transfer of genes has occurred using recombinant DNA technology. Generally a transgenic crop contains one or more genes that have been inserted artificially, either from an unrelated plant or from a different species altogether. Most of the transgenes used in agriculture come from yeast. Transgenics happens in nature, but technology speeds up the process considerably in the laboratory.

GM crops have demonstrated higher yields and greater disease and drought resistance than non-GM crops. But there are concerns in Peru about how they will affect the environment. In some cases, crops genetically modified for herbicide resistance can pass on the trait to the weeds, which then become resistant to herbicide.

Others worry about GM crops mixing with non-GM crops, losing identity for either agricultural production or food and market uses. A study published in Environmental Biosafety Research on March 25 found GM seedlings in three traditional maize fields in Uruguay. It is said to be the first report of cross-fertilization between GM and non-GM maize in South America.

But the study's lead author Pablo Galeano cautioned that the findings may not necessarily apply to other crops or countries. "Cross-fertilization depends on topography, size and orientation of fields, type of maize, wind direction during the flowering time, temperature and humidity, so it is hardly possible to generalize our results to other crops, areas or countries," Galeano said.

Alejandro Argumedo of the ANDES Association in Cusco says he worries about the physiological effects the introduction of GMOs would have on Peru's native species. He says Peru has one of the top 10 biodiversities in the world, and it needs to be protected. To combat the crop diseases that Peruvian farmers suffer, he looks to diversification instead of GM seeds.

The people of Parque de la Papa cultivate a variety of potatoes in small plots. By doing so the farmers say they mitigate crop diseases that attack large plantations and secure the survival of varieties that are more resistant to disease or bad weather. At present, a GM potato variety with resistance to the Andean moth has been developed in Peru by the International Potato Center. It was created with sterility, which means it cannot reproduce via normal means. INIA is in the process of developing a local GM papaya variety resistant to a local viral strain, according to the International Service for the Acquisition of Agri-biotech Applications (ISAAA).

ISAAA also reports that Peru is developing a National Biotechnology Center for Agriculture and Forestry as a research and service institution.

Many against the use of GMOs in Peru argue that there is not enough research and development in the field of biotech in the country for its use to be implemented. They say the 15 year moratorium will give Peru time to create the research infrastructure it needs to make better
decisions about transgenic crops. In addition they worry that the same institution creating GM crops (INIA) will be in charge of their regulation if the decree goes into effect. “I believe we can’t be closed to anything, but once we have contamination, there is no going back,” Argumedo said.

**GMOs in South America**

GMO crops are grown in most of South America, including Argentina, Bolivia, Brazil, Chile, Colombia, Uruguay and Paraguay.

For the second consecutive year, Brazil registered the world’s largest year-over-year increase in absolute biotech crop plantings, adding 4 million hectares in 2010 – a 19 percent increase – to grow a total of 25.4 million hectares, ISAAA reports. The country has doubled its annual grain production since 1990 while increasing cropland by only 27 percent. “Clearly, the countries of Latin America and Asia will drive the most dramatic increases in global hectares planted to biotech crops during the remainder of the technology’s second decade of commercialization,” said Clive James, ISAAA’s chairman, in the organization’s annual report.

Maria Andrea Uscafégui, director of Agro-Bio of Colombia, told Peru21 that Peru could become a major producer of GM seeds because of their ecological diversity and the ability to grow throughout the year.

But others say that that ecological diversity is the reason why Peru should stop the entrance of GM seeds. “GMOs can undermine the gains in the export of organic products. Peru is not Argentina or Brazil,” Brack said.

Argentina, a country known for its meat, has started to import meat from Brazil because 30 percent of the pampas is now filled with transgenic crops, mostly soy, instead of livestock, according to Brack. Walter Pengue at the University of Buenos Aires reports that while Argentina experienced short-term economic gains, the introduction of GM crops also put many small and medium-scale farmers out of business.

“There is an increasing consensus among consumers that they want safe, local, organic fresh food and that they want the environment and wildlife to be protected. Assuring that these things happen, South American countries must proceed with a broader evaluation of their agricultural policies and practices using the precautionary principle,” Pengue wrote. Most members of the Comisión Agraria of Congress have agreed to support the proposed moratorium of 15 years. Congress is expected to decide on the debate in coming weeks.