

Decision to embrace agbiotech being taken by farmers of the world

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For Dr. Clive James, the worst “pollutant” on earth, the one that threatens the environment more than any other, is not industrial smoke or toxic chemicals – it is poverty.

James, chairman of the International Service for the Acquisition of Agri-Biotech Applications (ISAAA) delivered the keynote address at the final day of the Agricultural Biotechnology International Conference (ABIC 2010) in Saskatoon. He pointed out that the world has only five years to achieve the United Nations' Millennium Development goal of cutting poverty in half by 2015. Yet the ranks of the world's poor have now swelled to one billion for the first time in history. This poses an enormous challenge for agriculture.

“In the next 50 years, the global population will consume two times as much food as humans have consumed since the beginning of agriculture 10,000 years ago,” he says.

The issue is critical not only for food security, but for security, period. He quoted a favourite saying of his longtime friend and colleague, Norman Borlaug, that “you cannot have peace on empty stomachs.” Borlaug received the Nobel Peace Prize for his pivotal role in the Green Revolution, a transfer of agricultural knowledge, tools, and techniques that bootstrapped many developing nations from starvation to net food exporters. He died last year at the age of 95.

James contends that conventional farming technology will not allow humanity to double food production as it must do by 2050 to feed a population of nine billion. This must be done using fewer resources such as land, water, fertilizers, and pesticides. And it must be done in such a way that small farmers – who make up 70 per cent of the world's poor – can easily participate.

“Biotechnology, and genetically modified crops specifically, can help alleviate poverty,” James says.

He cautions that biotech is no “golden bullet” to solve all our food security problems, but rather an essential tool in our toolbox. Also, he contends that biotech should not be forced upon anyone; those firmly wed to conventional or organic farming should be free to



continue.

“People who want to go organic and can afford the much higher prices should have that right,” he says.

The ISAAA is a small but influential organization, employing only 17 staff. Much of their work is devoted to communications efforts, such as their Crop Biotech Update, which is e-mailed to more than 750,000 addresses around the world every week. Canadians are well represented, with about 36,000 subscribers, about the same as the U.S. ISAAA news updates go to media in 65 countries in 26 languages, with an estimated reach of two billion people.

The organization also monitors uptake of agricultural technology worldwide. It is telling that some of the countries with the most mouths to feed – such as China and India – are among the leaders in embracing biotech and may soon surpass the Americas. These countries have the advantage of not needing to consult with such anti-biotech blocs as the European Union, since they consume all the food they can produce within their own borders. This has led to adoption of crops such as Bt maize, which is genetically modified with built-in pest resistance, and phytase maize, engineered to contain an enzyme that improves nutrition.

Africa, however, has remained an untouched frontier for biotech, with the exception of South Africa, which until two years ago was the only nation on the continent to embrace biotechnology for food production. Since then, other countries have come on board such as Egypt and Burkina Faso. James predicts a “cluster” effect as these countries lead the way for their neighbours such as Tanzania, Uganda, and Mali.

“Countries around Burkina Faso are asking, 'why not us?'" he says.

Mali, for example, is investing an impressive five per cent of its GDP into agricultural research. Officially, 16 countries in the developing world are growing biotech crops, a number that James says is likely higher due to “unofficial” adoption directly by farmers. He tells of talking to a Brazilian farmer who proudly showed him his crop of Roundup Ready (herbicide tolerant) soybeans, which were then illegal in his country. When asked where he had got them, he replied he had “borrowed” them from a friend in neighbouring Argentina. It is this stamp of approval, directly from farmers, that will ultimately prevail.

“This is the endorsement of 85 million farmers around the world independently making a decision to adopt this technology,” he says.