

Indigenous and peasant farmers do not want transgenic crops

Germán Vélez



Photo: Luis Alfonso Orozco

In September 2004, indigenous Zenú organisations from the Caribbean region of Colombia issued a declaration rejecting transgenic maize crops, which included the following: 'For the indigenous Zenú communities, maize is a fundamental element of our culture and our systems of production, so much so that we consider ourselves 'the children of maize'. Therefore we are conserving and cultivating over 25 native maize varieties. Our culinary culture is based on this crop, which is one of the major pillars of our food self-sufficiency. Taking into account that maize is a plant which cross-pollinates easily, there is a real threat that transgenic varieties will cross with our local maize varieties, and contaminate them in the same way that the native maize varieties were contaminated in Mexico.'

Colombia is the country with the second greatest diversity of flora and fauna on the planet. It is calculated that it has 10% of the world's biodiversity, around 45 thousand plant species and a great variety of animal species. This diversity is located especially in the territories of indigenous, black and peasant communities in different parts of the country. These populations have worked for hundreds of years to domesticate, improve and manage this biodiversity, integrating the various species into highly sustainable production systems. These agricultural systems form the foundation of the culture and food security of these populations.

Conservation of biodiversity

Colombia is also one of the countries with the greatest inequality in the distribution of land. The best agricultural land is concentrated in the hands of a few; 0.4% of landowners have holdings greater than 500 hectares which cover 61.2% of the rural area. These areas are used mainly for large-scale agro-industrial production and extensive cattle ranching. Small farmers are restricted to the most marginal areas with limited capacity to support productive systems. Since the 1950s, the introduction of production models based on the green revolution has generated a process of erosion and loss, both of biodiversity and of traditional cultivation systems. In recent years, following the failure of this agricultural model, there have arisen numerous initiatives which promote the conservation of biodiversity *in situ*, or within the local communities, by

means of sustainable production systems.

At the same time the official sector promotes the conservation of agricultural biodiversity *ex situ*, through germplasm banks, which are disconnected from the conservation carried out by local communities. These collections, in addition to being centralised and not kept up to date, undervalue the role of farmers in the conservation and management of biodiversity.

From exporters to importers

The agricultural model based on the agro-industrial production of monocultures has produced negative environmental and socio-economic impacts, especially for the great majority of small farmers. Until the beginning of the 1990s Colombia was self-sufficient in the supply of food and other raw materials. But in the last decade the crisis in the agricultural sector has deepened. The opening up of the economy, which permitted the massive importation of highly subsidised agricultural products, mainly from the United States, has rendered the national production uncompetitive and unviable. In the year 2003, for example, the country imported more than 8 million tonnes of foodstuffs. Imports of maize amounted to 2 million tonnes, which corresponds to more than 70% of national consumption.

Transgenic seeds enter the country via the importation of food and programmes of food aid, as well as in the form of industrially processed products, especially for human and animal food.

Moreover, Colombia is importing this transgenic maize and soya without any governmental authority undertaking the monitoring and evaluation of bio-safety. In 1998 the Colombian Agricultural Institute, ICA, attached to the Ministry of Agriculture, issued the regulations relating to transgenic products for agricultural use; and in 2001 the regulations relating to products for livestock use. For the implementation of these rules, the ICA created the *National Technical Council for Bio-safety*, which is made up mainly of representatives of various bodies with a position in favour of the introduction of transgenic products. It has no representation from the peasant farmer and indigenous sectors,



Photo: Luis Alfonso Orozco

Local maize varieties are the central pillar of food self-sufficiency and the culinary culture.





The Zenu territory has a rich biodiversity, which forms the basis of their livelihoods. Semillas supports the communities in their development efforts towards food security.

nor from environmentalists and the monitoring authorities of the state.

Sidelined from the debate

The Colombian government has ratified the Bio-safety Protocol, which permits the control of cross-frontier movement of transgenic organisms. However, it has failed to address this matter with seriousness, objectivity and independence; and the position will be more critical once the Free Trade Agreement between Colombia and the USA comes into effect, at the beginning of 2006. This agreement will include the lifting of restrictions on the introduction of transgenic crops and foods in the signatory countries. This would totally nullify the application of the Bio-safety Protocol and other national regulations.

The discussion on the effect of transgenic crops and foods has entered the public arena only recently. There is a strong alliance between government authorities and the agribusiness sector, which promotes the transgenic crops. The largest part of society, especially consumers and farmers, has been sidelined from this debate, and is not consulted on the adoption of these technologies. Meanwhile, the media have not dealt with these matters in an objective and independent way. In 2003 large seed companies such as Monsanto and Dupont presented applications for the commercial release of various transgenic maize crops. Currently these companies are conducting field trials in the main maize producing regions. According to the public declarations of the government, it is likely that these crops will soon be released on a commercial scale. It is very worrying that this will most probably be done without the required bio-safety studies being carried out, and passing over the heads of most of society.

Risks and concerns

There will be several impacts of the release of transgenic maize (resistant to herbicides) in Colombia. Firstly, there will be an impact on biodiversity. Colombia is one of the countries with the biggest diversity of maize in the world. In maize, because of its mechanism of pollination, there is an enormous risk of genetic contamination of the local varieties by transgenic maize. This has already happened in

Mexico and causes a genetic contamination problem regarding the biodiversity of wild and cultivated maize. The contamination can be introduced both through maize imported as a foodstuff, which ends up with farmers who then sow it in their fields, and through the agro-industrial transgenic crops grown near the indigenous and peasant farmers' lands.

The second worry about the use of transgenic crops is the possibility that the genes of weed species will also acquire resistance to the herbicide. In the United States and Argentina, where transgenic Roundup Ready maize and soya have been grown on a massive scale, weeds resistant to Glyphosate have arisen, which has generated an increase in the use of this herbicide. Moreover, there is a risk that the toxins of the Bt-transgenic crops could also affect soil micro organisms. Thirdly, the effects produced by transgenic crops on the local economies of the peasants and small farmers must be considered. Transgenic crops lead farmers to a total dependency on patent-protected technological packages, controlled by the trans-nationals. These

patents violate the right of farmers to keep and exchange their seeds. Additionally, farmers who are the victims of contamination by transgenic maize can be sued by these companies for the 'illegal possession' of their patented genes.

Finally, there is the concern that there could be a health risk. We know that full systematic studies, which would allow a definitive evaluation of the effects of transgenic foods on human and animal health, have not been carried out.

Peasant alliances

In Colombia, as in other Latin American countries, maize is not just a basic foodstuff of the population; it is also a fundamental component of the culture and of the peasant production systems. It is not surprising, therefore, that indigenous, black and peasant organisations in many parts of the country hold a position rejecting transgenic crops. They do not want to accept the negative effects they might cause in their regions, especially related to biodiversity and food self-sufficiency. So they have been building alliances as a defence strategy against the transgenic crops.

Don Juan Sánchez is a peasant 'seed guardian' from the Buga region, in the Valle del Cauca. When asked about transgenic seeds, he replied: *"Maize is the life of the country people; if you take away maize you take away everything...I don't accept these transgenic seeds, because I know the risks they have and the contamination they cause, as has happened in Mexico. On the other hand I believe that the way to counteract the threats of these seeds is to make our neighbours and*



the rest of the people aware of the negative effects of transgenics and the threat that they represent to us. We believe that transgenics will ruin our seeds, and this we cannot allow.”

Endogenous development

Grupo Semillas (Seeds Group) is a Colombian non-governmental organisation which has been active since 1993, and which has been part of the Compas Network since 2003. Grupo Semillas works with different stakeholders within Colombian society, especially on environmental and agro-ecological issues, promoting sustainable management of biodiversity and genetic resources. Its work is based on traditional knowledge and local strategies for agriculture and food security. Grupo Semillas supports and advises indigenous, black and peasant organisations, especially in the Caribbean, Pacific and Andean regions of Colombia

Grupo Semillas is linked to and supports various networks and organisations that work at regional and national level on the issue of transgenetics. It has also set up links and joint actions with the Public Action Group of the University of Rosario, with the support of other legal rights groups and environmental NGOs, to question the commercial release of transgenic cotton.

The actions undertaken jointly with the indigenous and peasant organisations are directed at the quest for endogenous development, self-management, and the strengthening of local food self-sufficiency. Activities include: diagnosis of medicinal plants and other elements of biodiversity; organising local fairs and events about agro-ecology *Encuentros por la Vida*, or Meetings for Life, are about local culture and agro-ecology organised for Farmer Schools, women’s groups and youth groups.

Moreover, local bakeries using grains from traditional plant varieties are supported, and local production of shampoo, creams and soap made from local plant varieties is stimulated. Local farmers’ organisations are strengthened through farmer-to-farmer exchange activities, strategic networking and support in their relationship with state organisations.

Transgenic-free zone

On these lines Grupo Semillas is also working with the indigenous Zenú communities in the Caribbean region of Colombia. The Zenú have a very strong culture centred on maize. They manage more than 25 native varieties of maize

Box 1 Community actions towards food security include:

- Recovery, management and local exchange of native seeds
- Awareness-raising and education of the general population about biodiversity and food security, by means of workshops, seminars, meetings and fairs;
- Strategic alliances between different sectors of society (peasant organisations, NGOs, environmentalists, academics, and consumers, among others);
- Legal actions against the introduction of transgenic crops in Colombia;
- Rejection of government and private programmes of agricultural support and food aid which include transgenic seeds or foods;
- Pressure on the government to permit access to full information for the communities about transgenic technologies, and to consult them in the taking of decisions on the approval of these technologies.

with qualities adapted to the different environmental conditions, production systems and culinary uses. So these communities are very concerned about the arrival of transgenic maize in the form of foodstuffs and crops. A few years ago they sought the assistance of Grupo Semillas. Now these indigenous communities are waging a ‘campaign in defence of the culture of maize’ through a process aimed at declaring their territory a ‘transgenic-free zone’.

The Zenú people are aware of the difficulties that this process entails, for it goes further than merely producing a written declaration. The challenge is its effective implementation. This requires a campaign of awareness-raising and gaining acceptance of this decision by the communities and by the local and regional authorities. For this reason ‘the declaration of a transgenic-free zone’ is considered a medium term objective by the Zenú people, amongst the other activities towards self-sufficiency and endogenous development.

There are many similar initiatives in other parts of the country in opposition

to the entry of transgenic seeds and foodstuffs (see box 1). To achieve a significant impact, however, it is still necessary to enhance the public debate and other local actions, so that these views are taken into account in the decision-making on these technologies. Grupo Semillas is hopeful that its actions towards endogenous development and against transgenic crops and foods, will be able to strengthen local communities, and promote indigenous, peasant and black culture in Colombia.

E-mail: semillas@semillas.org.co
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Zenú community showing their local maize varieties during a Meeting for Life about local culture and agro-ecology.