Agrobiodiversity@knowledged
A knowledge programme on agricultural biodiversity supported by Oxfam Novib and Hivos

Rio+20 Workshop report

“We are not talking about a niche in production or for consumers, but about a shift in the model of agriculture.” Paulo Petersen, AS-PTA & Brazilian Agroecology Association (ABA)

16 June 2012, Pontifica Universidade Católica do Rio de Janeiro. At a session of the IIED Fair Ideas Conference, four speakers explain how in their regions, agrobiodiversity promotes resilience. Hivos and Oxfam Novib organised this session as part of their 3-year knowledge programme Agrobiodiversity@knownledged.

Facilitator: Bishwadeep Ghose, Knowledge Officer Green Entrepreneurship HIVOS (India regional office)

Speakers:
- Andrew Mushita, Community Technology Development Trust (CTDT), Zimbabwe
- Sue Edwards, Institute for Sustainable Development, Ethiopia
- Habtemariam Abate, Sustainable Land Use Forum (SLUF), Ethiopia
- Paulo Petersen, AS-PTA & Brazilian Agroecology Association (ABA)
“We need to put more efforts in empowering communities to manage these resources that improve livelihoods.” Andrew Mushita, Community Technology Development Trust (CTDT), Zimbabwe

Andrew Mushita spoke about plant breeding and seed development, particularly within the context of CTDT’s activities.

- One of the activities on which CTDT focuses in their work with marginalised communities in Zimbabwe and Zambia, is agrobiodiversity. They support community seed banks and seed fairs. “Agrobiodiversity is location specific,” highlights Andrew. “It is farmers who have the knowledge to use and preserve agrobiodiversity.”

- Agrobiodiversity is under a lot of threat from monoculture systems and climate change. Communities are crucial in this area: they are not only recipients of technologies but contribute their knowledge in, for example participatory plant breeding, creating new varieties that are more resilient to climate change.

- Seed fairs increase biodiversity in the area. They also function to increase awareness amongst not only farmers, but also researchers, policy makers, extension staff and the media.

- CTDT also supports on-farm breeding. Farmers start growing more crops, which is important for livelihoods and food security.

- There are many policies in place for plant breeders, but very little for farmers – who are even restricted from marketing certain seeds. The balance of the scale is tilted so much towards monocropping, with much financial support for research, but not for farmers.

- Andrew suggests a legislative framework that includes a national biodiversity authority, acknowledging community rights and traditional knowledge, and the establishment of a biodiversity fund.

“The point I am trying to drive home,” Andrew concludes, “is that farmers can produce good seed that can be marketed. It is often of much higher quality because it is produced in the own environment. We need to put more efforts in empowering communities to manage these resources that improve livelihoods.”
“We don’t need a green revolution, but a brown revolution.” Sue Edwards, Institute for Sustainable Development, Ethiopia

In her presentation, Sue Edwards discusses agricultural biodiversity in Africa.

- Many people do not realise that Africa is large and diverse, with a broad range of agrobiodiversity. Agricultural education needs to be redirected towards Africa, where the potential of research and development is enormous. However, Africa is only seen as a source of extraction,” Sue says.

- Diversity is the norm in Africa’s farming systems. Africa has more than 50 types of farming systems. The Congo basin has a high endemicity, for example, with many species that are unique to the region. Most African smallholders grow more than ten crops, particularly women.

- “We don’t need a green revolution, but a brown revolution,” according to Sue. There is an urgent need to improve Africa’s soils, and build up its crop base afterwards. Sue highlights the effectiveness of bioslurry compost, an organic fertilizer made from dung and water which is the wet waste from a biogas digester. Sue provided the example of a programme of the ISD in Tigray. Compost dramatically increases yield of a variety of species, on a more sustainable basis than with the use of chemical fertilizers. The success of the programme is particularly seen in increase of the percentage of grain in the harvested crop (the grain index) of the project farms.

- The African Union has adopted a resolution to support organic farming, and an African Organic Platform will be established. Sue is in Rio to support and push this within the IFOAM delegation.

“We want ecological intensification, not industrial intensification,” Sue concludes. “We need to show that Africa can be a food basket for the rest of the world.”
“In addition to a constructive policy dialogue, the elements of biodiversity could be improved with research input,” Habtemariam Abate Gorfe, Sustainable Land Use Forum (SLUF), Ethiopia

Habtemariam Abate spoke about agrobiodiversity in agroforestry systems.

- Policy makers often believe that indigenous agroforestry is not productive. The agroforestry experience of the Gedeo community in Ethiopia that Habtemariam presents shows otherwise. Indigenous agroforestry is an approach to cultivating trees and agricultural crops that is adapted to specific agroecological conditions. Indigenous agroforestry is a self-sustaining system. It offers a solution to the loss of fertile soils in Ethiopia.

- This system seems to take up a lot of land, but it provides space for much more people than monoculture systems, and supports 3 million people. In a small unit of land, you can maximize production not only on the ground (floor of the forest), but also off the ground, in the upper and middle stories of the forest.

- SLUF works in the most degraded parts of the country, on hillsides and farmlands. On hillsides community conversation is stimulated to help farmers understand their problems. Afterwards, they are supported in the capturing of rainwater and production of crops, with as a final goal an intensive agroforestry system.

- A challenge, aside from political scepticism, is the cultural barriers within the community. In the northern highlands for example, people do not regard certain crops from the agroforestry system as food.

“In addition to a constructive policy dialogue, the elements of biodiversity could be improved with research input,” Habtemariam concludes.
“Scientists say that farmers produce grains, not seeds: seeds are to plant, grains are to eat.” Paulo Petersen, AS-PTA & Brazilian Agroecology Association (ABA)

Paulo Petersen provided an example of upscaling agricultural biodiversity in the semi-arid region of Brazil, with the “Seeds of passion” project.

- Unfortunately, the government does not take the lead in upscaling agrobiodiversity projects in Brazil: most experiences are lead by civil society.

- AS-PTA bases their biodiversity programmes in agroecology, so on traditional practices for access to biodiversity, involving polycultures, use of local seeds, use of familiar stocks of seeds, etc. “What we want is intensification without simplification.”

- Community seed banks, where people share seeds and knowledge about seeds, are common in the semi-arid region but invisible from a scientific perspective. Scientists say that farmers produce grains, not seeds: seeds are to plant, grains are to eat.

- During a drought in 1998-1999, people in Paraiba mobilised support for a seed programme. They protested the conventional seeds that the government was distributing: “We have our own seeds!” people said, instead they needed assistance in other areas, like reinforcing seed banks (but using their own seed).

- In the “Seeds of passion” programme, AS-PTA stimulates farmers to develop their own seeds, building a network of 150 seed banks in Paraiba state. The programme combines the exchange of knowledge with debates. “We need to reinforce the seed as the basis of our autonomy,” Paulo says. “If we lose our seeds, we lose the chain of autonomy. If we buy commercial seeds, we will need agrochemicals.”

- AS-PTA and Embrapa started a participatory research on the evaluation and selection of traditional varieties of “grain”, with the goal to compare local seeds with seeds that the government distributes in the “Brazil without Misery” programme. It has shown that there are many ways in which farmers evaluate the quality of their seeds, not just in terms of yield. Using qualitative and quantitative indicators to evaluate the different types of seeds, farmers were convinced about the benefits of local seeds over commercial seeds. Besides a higher yield, local varieties offer a flexibility of genetic materials that are crucial in resilience to climate change, for example.

Paulo concludes by mentioning the efforts made by AS-PTA to launch a national programme on agroecology with the government at Rio+20, “to reinforce and upscale these kinds of debates”. But the resistance of researchers is large. “We didn’t even receive the first draft. We are three days before the UN conference, so we are not optimistic that it will be launched.”
Discussion

Some points that were discussed with the audience after the presentations:

- The expectations of the Brazilian agroecology policy are not very high. Meetings were held with civil society groups throughout Brazil, which led to concrete proposals where peasant agriculture and agroecology form the basis. “We are not talking about a niche in production or for consumers, but about a shift in the model of agriculture,” Paulo explains. But unfortunately the ministry sees agroecology as a niche.

- There is a suggestion to make knowledge about agrobiodiversity more accessible, through Facebook for example. Why is it so difficult to share this information? Why not share knowledge about seeds and their properties through social media, across Brazil? Sue is very positive about this possible development, giving the example of IFOAM and its young representatives blogging and tweeting about Rio+20. “You can do it,” she says. “My dream is to see you young people driving this from the base. Education can move beyond the university level. Over to you, I love your enthusiasm. Look for young organics and organise yourselves.”

- Andrew adds a few words of caution. As knowledge is becoming a tradable commodity, he says, people don’t want to give away so easily. Local agricultural knowledge is under threat, as there is an imbalance of policies that protect different kinds of knowledge. “It is an unfair world we live in, but we need to be aware of these challenges.”

With this unresolved dilemma the discussion came to a close. It will be worth to further explore in the AgBiodiversity@knowledged programme which strategies can be used for wide knowledge sharing on agrobiodiversity, while at the same time ensuring that such knowledge will not be commodified or misused

Report by Laura Eggens, ILEIA

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