FOREWORD

Calls for food sovereignty continue to rise in importance among NGOs and social movements around the world. This past February, for example, 600 farmers and activists took part in the World Forum on Food Sovereignty in Mali that championed the concept. The Nyéléni declaration – the official outcome of the forum – is a testament to a remarkable level of agreement on what constitutes the foundation for socially and ecologically just food systems.

Last November, USC Canada and Ethio-Organic Seed Action (EOSA) hosted a modest yet important international gathering in Ethiopia entitled: “From Seeds of Survival to Seeds of Resilience: An International Gathering for Seed and Food Sovereignty.” Seed savers from over fifteen countries – farmers, CSO activists, scientists, and a few government officials, speaking ten different languages, affirmed their belief that seed, crop, and varietal diversity - together with local control over that diversity - are strong prerequisites for food sovereignty: people’s right to grow their own food and to decide their own agricultural policies.

As a means of spreading information and stories about food sovereignty and the important work of farmers at the heart of this sovereignty, participants at the gathering asked USC Canada to expand the outreach of its Seeds of Survival newsletter. They felt that it could play a useful role in stimulating dialogue, debate, and analysis about food sovereignty, agro-biodiversity and seed issues.

This newsletter carries that spirit. It includes a feature article from India as well as news and stories from the Americas – Cuba, Honduras, Bolivia – and Canada. We hope you find it useful. We would love to hear your suggestions for improving future issues. And of course we thank those of you who took the time to write and send pieces for this edition.

Your Friends at USC Canada
Reclaiming Food Sovereignty and Resistance

By Vanaja Ramprasad, Director of GREEN Foundation – India

Food as a source of sustenance of life conjures up images of diversity, culture, culinary skills, and healthy, happy people. Food was gathered from the wild forests and cultivated and celebrated as an offering to the higher spirits. Food signified an intense universal energy and was worshipped as nature’s gift.

Today’s technological developments have brought in a new dimension to the production, distribution, and consumption of food: a global politics of control. This has manifested itself in the form of a technological supremacy that has undermined indigenous knowledge and the capacity to cope. The world has witnessed an increase in controls over natural resources, and the poor and the marginalized have been denied access.

In bringing this situation to the fore, politically conscious social movements are pushing for food sovereignty, instead of merely food security. This is not merely a matter of semantics. The term has social, cultural, and ethical significance. Food sovereignty represents a political resistance against global control of our food systems. This resistance reclaims the value of food as a source of nourishment, peace, health and prosperity. Food is not merely a commodity to be manipulated.

Biotechnology is not the answer

In the last decade, food and agriculture have increasingly been caught in the clutches of biotechnology and genetic engineering. These are being offered as solutions to reduce hunger and malnutrition through higher yields. However, there are serious doubts about the “pro-poor” biotechnology that is emerging and about whose interests are served. A clear example of such a case is Bt cotton.

Bt is the generic designation for seeds to which a gene from the soil bacteria Bacillus thuringiensis (Bt) has been added. This gene enables the plant to produce protein that is toxic to some types of insects, especially the American bollworm. More than half the pesticides used in India are aimed at cotton, hence the justification for planting Bt cotton. However, this justification does not hold water because cotton is susceptible to 17 other pests in India and even Bt cotton would still require continuous use of pesticides. The large-scale introduction of Bt cotton met with resistance because of implications around monopoly control and the creation of dependence, both on seed and other inputs.

The story of Golden Rice is similar. Golden Rice promised to alleviate malnutrition and blindness among rice-eating populations. But the advent of Golden Rice was clearly driven by a desire to control the market, rather than by humanitarianism. To offer the poor and malnourished a high-tech rice, tied up in multiple patents, that cost more than US$100 million to invent and much more to develop, reminds one of what Leo Tolstoy said: “I sit on a man’s back, choking him and making him carry me and yet assure myself and others that I am very sorry for him and wish to ease his lot by all possible means – except getting off his back.”
In his essay, *Hunger: Old torments and new blunders*, Amartya Sen points out India’s unenviable position of having high levels of undernourishment and starvation coupled with large unused food stocks. According to Sen, what limits Indian food consumption today is not an operational inability to produce more food, but rather a far-reaching failure to bring entitlement to existing food within reach of deprived sectors of the population. It is not merely a single vitamin that is missing in the diets of people, but food as a whole.

It is obvious that the current food crisis is the result of the unsustainable global economic system – with its basis in profit and over-consumption by a small percentage of the population. The struggle to reclaim the right to food and livelihood security for all is the struggle to retain control, command, and ownership over the means of food production. The major obstacles are a result of the misconception that food trade is vital to world food security.

Until that view changes, localization of food production at the level of the community, state, or region will continue to be rejected as a viable alternative.

**Intellectual Property Rights**

Further adding insult to injury, sovereign nations have been compelled to commit themselves to providing Intellectual Property protection on biodiversity. In particular, northern countries have pressured weak southern countries to accept the UPOV type "sui-generis" options, thereby forcing them to accept intellectual property provisions beyond their obligation to World Trade Organization. The consequences for food sovereignty and health care are grave. The patenting of plant varieties will limit access to genetic resources, undermine traditional seed exchange, and raise the cost of inputs. Furthermore, the Intellectual Property Rights system recognizes the individual and not the community, weakening the collective knowledge and creativity that has hitherto contributed to local knowledge systems.

**A growing resistance**

The resistance movements are voicing concerns and responding in different ways. There are campaigns against bio-piracy and the patenting of biodiversity. Movements have resisted the co-opting of national governments and insisted upon developing national level legislations to protect and promote local knowledge systems. Movements have engaged themselves in seeking clarifications for the ambiguities, highlighting the traps, bottlenecks and challenges.

Vast efforts have sprung up across the world, especially among agrarian communities, to spread the concept of sustainable localized food production, starting with seed saving. Multiplying and exchanging seed within communities establishes the right to their livelihood. Saving seeds symbolizes the spirit of self-determination and the spirit of regeneration to regain the control over resources and rights to food.

---

Dr. Vanaja Ramprasad started her career in a Community Health Program in 1973. She has worked with many grassroots organizations and has been actively involved in issues relating to women and population control, alternative health care systems, and now alternative agricultural practices. In 1992, she initiated the seed conservation program in the border areas of Tamilnadu and Karnataka. **GREEN Foundation** is a community-based organization working with disadvantaged groups of marginal farmers in the semi-arid regions of South India, towards the conservation of agro-biodiversity and the promotion of sustainable agriculture.
Participatory plant breeding (PPB) has grown in popularity over the last few years and there are now several studies available that show PPB has strengthened food sovereignty in varying contexts in the South.

Through PPB, farmers have been enhancing local crop diversity and reclaiming their role as breeders. Though it has been 20 years since the first work was done in participatory plant breeding, we are finally starting to see discussion in some academic circles about farmers’ capacity for plant breeding.

The origins of PPB in Cuba
In Cuba, participatory plant breeding began in 1999 with the first on-farm maize diversity fairs. Through these fairs, participants were able to observe a wide range of varieties growing on Cuban farms and to subsequently acquire the seeds to sow in their own fields. The seed diversity fairs emphasized the importance of organic production. The switch to organic methods was inspired by the dearth of agrochemical inputs that Cuba experienced once it was no longer able to import these products at preferential prices from the Soviet Union.

Cuban research institutions, with the support of international agencies, began to promote a movement of seed diversity fairs and farmer-led research, which has benefited more than 7,000 farming families from 49 communities in five provinces of the country.

850 researchers and extension workers, as well as 258 policy-makers, were trained in the participatory methodologies at the root of this training approach. Results were very encouraging!

There was a significant increase in the number of varieties and crops grown, both in per hectare yields and in economic revenues.
The PPB received an award from the Cuban Academy of Sciences in 2006.

While the program initially dealt exclusively with maize and bean selection, the focus has since broadened in scope. This expansion is a natural result of the continuous research processes that are the basis of the program. Diversification also reflects the involvement of an increasing number of institutions, making the program more and more multidisciplinary in nature.

**Local innovation**

Local knowledge is being combined with scientific knowledge in a complementary fashion.

With the help of formal researchers, farmers design the research, then evaluate and disseminate the outcomes, which promote not only genetic diversity, but also technological diversity and innovation.

The initial idea of promoting farmer participation in varietal selection has thus grown into a farmer-led agricultural innovation program called the Program for Local Agricultural Innovation (Programa de Innovación Agropecuaria Local, PIAL).

A growing critical mass of farmers, researchers, and state extension workers are convinced of the merits of this participatory approach to agricultural development. They are now working hard to convince skeptics that this farmer driven innovation and “bare-foot” science is a scientifically, economically, and socially viable contribution to vibrant food production in Cuba.

---

**Dr. Humberto Ríos Labrada** is an agricultural scientist with the National Institute of Agricultural Sciences (Instituto Nacional de Ciencias Agrícolas, INCA) in Cuba. Dr. Ríos helped create the Participatory Plant Breeding Program and he coordinates the Program for Local Agricultural Innovation. INCA: San José de Las Lajas, La Habana, Cuba CP 32700.

---

**A Testament To Determination:**

**THE BENEFITS OF LOCAL SEED PRODUCTION**

**By Foundation for Participatory Research with Honduran Farmers (Fundación para la Investigación Participativa con Agricultores de Honduras, FIPAH) – Honduras**

For ages, seed has been highly valued by agricultural societies that understood its importance as the foundation of the food chain. For this reason, seeds have been passed on as an inheritance from parents to children, generation after generation.

The global agro-industrial system has taken advantage of the importance of seeds increasingly monopolizing their use and extracting numerous benefits. This has led to the development of farming that is dependent on the “improved” seeds offered exclusively by formal research institutes and seed companies.

Honduras is no exception and the seed system is designed in such way that large companies have cornered the seed market.

The Foundation for Participatory Research with Honduran Farmers (FIPAH) has been working hard to bring seeds control back into farmers’ hands, promoting food sovereignty in three marginalized regions of Honduras.

FIPAH is helping put seeds control back in farmers’ hands.
the country. They begin by strengthening farmers’ capacity to produce seeds and then helping them to implement alternative production and marketing systems.

FIPAH’s key strategy is to facilitate the formation of farmer research teams known as CIALs (Comité de Investigación Agrícola Local). CIALS conduct participatory plant breeding, establish a secure seed supply through on-farm conservation and seed/gene banking, agroforestry promotion, household vegetable gardening, and cooperative grain storage systems.

Local Production
In the Vallecillos region, CIALs have been promoting the local production of maize and bean seeds for several years. Their results are encouraging. Dolores Raudales, a member of the CIAL Chirinos, says that, “In previous years, we in the community produced beans and, despite using good techniques for cultivation, the yields were low because we did not use quality seeds.”

Generally, the yields in Dolores’s community did not exceed 450-550 kg per manzana (0.7 Ha). In 2005, after the CIAL started training farmers in bean seed production, productivity climbed to an average yield of 800–900 kg per manzana – a direct result of the use of better quality seeds. Dolores says that, with this kind of success, “One after another, farmers have become convinced of the benefits of the production and use of quality seeds, produced locally.”

Seed Bank Success
In Yoro region, CIALs are responsible for three successful seed banks. One of the most vibrant is in the community of Santa Cruz. Farmers there place a surplus of between 450-680 kg of maize seed a year in the bank, ready when local need it.

Dionicia Corea, known as “Nicha”, is the coordinator of another CIAL -- Mina Honda -- also in Yoro. Every year they distribute local varieties of seed – including Macuzalito, an improved local variety that was produced through participatory plant breeding – thus ensuring better harvests and improving the income of farmers from the highlands.

Farmers in the Otoro region also have a positive story to tell. Their regional association of CIALs -- ASOCIADRO -- has organized a seed committee, consisting of ten farmers, that is managing to produce enough seed to fill three banks in the region.

Hindered by National Policy
The impacts of these encouraging initiatives are hindered, however, by a national policy context that fails to promote and protect community seed producers and their banks. Policies favour large seed producers, especially since the introduction of the Central America Free Trade Agreement in April. Nor are local governments aware enough of the benefits of these types of initiatives. FIPAH is challenged to help them both level of government to understand how their support for this innovative and successful program will not only offer seed producers the opportunity to sell their products but contribute to broader community development.

Local producers must be able to produce and use local seed varieties and materials. They simply cannot afford to do otherwise. They have their work cut out for them. Far too many farmers are without access to an alternative seed system. But, as well all know, farmers are stubborn and not easily defeated. The rapid growth of these Honduran CIALs is a happy testament to that determination!

The Foundation for Participatory Research with Honduran Farmers (Fundación para la Investigación Participativa con Agricultores de Honduras, FIPAH) is a non-profit organization that works to support food sovereignty and environmental protection with highland farmers in three regions of Honduras through participatory research methodology.
The Bill and Melinda Gates Foundation has joined forces with the Rockefeller Foundation in the Alliance for a Green Revolution in Africa (AGRA). AGRA will grant a total of $150 million to various agencies for agriculture this year, several hundred million dollars next year, exceeding $1 billion in less than a decade. Among other things, the plan proposes to bring more “improved seeds” and fertilizers to African farmers.

While the attention to agriculture is commendable, several questions must be asked: How does the AGRA initiative apply the lessons learned from the last Green Revolution in Asia in the 1960s and 1970s? How does an initiative of this magnitude remain accountable to farmers, and place them at the centre of its priorities and directions? What will be the role of industry in the initiative? Who stands to benefit most, and who could lose?

With the support of African counterparts, USC and other Canadian organizations organized a week-long series of events to help raise awareness about the importance of small-scale agriculture and to create an open dialogue with the Canadian public and policy makers. The week culminated with a public forum at the Ottawa Congress Centre on March 26, where more than 500 people came to hear farm leaders and scientists from Ethiopia, Mali, Cote d’Ivoire, and Canada speak about the problems with a continued emphasis on industrial agriculture, and the impact it could have on African farmers.

Three of the speakers – Ibrahim Ouédraogo, Assétou Samaké, and Mamadou Goïta – are members of the Coalition for the Protection of African Genetic Heritage (Coalition pour la protection du patrimoine génétique africain, COPAGEN). COPAGEN is widely recognized for its concerted actions in defence of farmers’ rights in West Africa.

Speaking at the event, Mamadou Goïta questioned the need to import solutions. “There have been many solutions proposed for Africans,” said Goïta, “but we’re always dealing with the consequences, not the actual solutions. Despite the fact that we have such a richness and diversity of solutions ourselves.”

During the first Green Revolution in Asia in the 1960s and 1970s, productivity and yields increased in some crops, but the damage
caused by that model was tremendous, says forum panellist Pat Mooney of ETC Group.

"With farmers growing a handful of export crops and relying heavily on chemical pesticides and fertilizers, there was alarming erosion in biodiversity and soil fertility,” said Mooney. “Farmers were left with a handful of varieties compared to what was available before.”

That Green Revolution brought a flood of experts, seeds and inputs from outside, says Goïta. Farmers lost much control of their seeds and the ability to make their own choices about what they grow.

Renowned geneticist Melaku Worede, one of the founders of USC’s Seeds of Survival program, spoke about supporting farmers’ own solutions. “There’s so much potential with seeds in Africa that is not being explored. It’s being undermined by outside solutions.”

"Rather than the industrial agriculture model, we should support more holistic approaches to agriculture,” said Dr. Worede, adding: “Farmer-led programs tend to look at more than just yields. They’re about raising productivity without losing biodiversity.” This is crucial because biodiversity is the foundation for all agricultural systems and is particularly important in small-scale agriculture.

The Bill and Melinda Gates Foundation responded to an invitation by forum organizers to discuss our position. We were encouraged by their openness to listen to farm leaders and their concerns, and their affirmation that small-scale farmers must be placed at the centre of any initiative that is meant to help them. It remains to be seen how the agencies involved will proceed with their plans, but it is clear that USC and our partners must continue to promote this dialogue.

USC Canada is part of a network of NGOs working together to organize this campaign and events like the public forum. Our partners include the Canadian Biotechnology Action Network (CBAN), ETC Group, Inter Pares, National Farmers Union, and Partnership Africa Canada. For more information, visit USC Canada’s website. See also links to other articles on this issue in the “New Publications and Resources” section below.

SEEDY SATURDAYS: SEED EXCHANGES
By Kate Green, Manager of Public Engagement and North-South Relations, USC Canada

Canada has a strong heritage of gardening traditions in many diverse regions. We are also rich in agricultural and horticultural resources. Unfortunately, our access to diverse Canadian plant varieties has diminished severely in recent decades. Thousands of plant varieties are suited for Canadian gardens, but only a handful are available to most growers.

In response to this problem, family farmers and the friends of family farms are organizing and participating in public events called Seedy Saturdays. The first Seedy Saturday was launched in Vancouver in 1989, co-sponsored by USC Canada and two Canadian farmers who had visited the agency’s Seeds of Survival program in Ethiopia. Since then, Seedy Saturdays have sprung up across the country. There were forty-five in February and March in 2007.

Though hosted by a variety of different groups and individuals, there are always a few common features:
They are open to the whole community and free or very low cost to attend.

There is always a seed exchange/free seeds table.

Workshops and in-depth training are offered on food, seed, and gardening issues.

Homemade food, organic seeds, and other farm products (e.g. candles, tools, equipment) can often be found for sale.

Seedy Saturdays bring together home gardeners, seed savers, native plant collectors, agriculture conservation groups, and community gardeners as well as local seed companies that sell open-pollinated varieties of vegetables, fruits, flowers, grains and herbs. Conversations are lively and loud, enthusiastic discussions about cropping strategies, seed conservation, organic tools and the possibility of trading seeds. Visitors often take home heritage seeds to try in their home gardens as well as recipes that are both tasty and nutritious.

During the past year, USC Canada staff were present at seven Seedy Saturdays and offered workshops as well. Board Members and volunteers ensured our presence at seven more. An additional 17 Seedy Saturdays accepted USC newsletters, flyers, and posters to set out as general information. At each of these events, USC's presence added an international angle to the need to respect farmers' knowledge, work towards food sovereignty, and promote the national and international Ban Terminator campaigns. A list of the events and details on Seedy Saturdays can be found at www.seeds.ca.

Kate Green joined USC Canada in October 1993 as a Program Officer. She has helped guide USC’s Bangladesh and Nepal programs as well as Seeds of Survival. Kate connects people across Canada with the programs and people of USC Canada. In this Public Engagement role, she seeks out opportunities to meet groups that have an interest in food security and policy advocacy in Canada.

The National Gathering On Biodiversity And Native Seeds

By Kawsay Centre of Indigenous Cultures (Centro de Culturas Originarias Kawsay) and Interdisciplinary Program for Integrated Development (Programa de Desarrollo Integral Interdisciplinario, PRODII) – Bolivia

The international gathering on agro-biodiversity and seeds that took place in Ethiopia in November 2006 included two participants from Bolivia, a representative from a small regional NGO – PRODII – and a leader from an indigenous organization that works in all of Bolivia major regions, KAWSAY.

Their involvement in the gathering inspired a collaborative effort along similar lines. They returned to their home country determined to undertake training workshops and a
national gathering, winning the support of leaders in the Municipality of Oruro along the way.

Key objectives of this indigenous peoples’-led initiative were:
1. To value and strengthen our cultures and identities under the idea of “unity in diversity”
2. To strengthen community territorial organizations for seed production and biodiversity-based agriculture
3. To exchange knowledge and technologies for the production of seeds and the generation of policies and strategies by communities.

The process began with ten regional workshops in northern Potosí, Oruro, and Cochabamba. Delegates from these workshops then participated in the national event from April 19-21. Participants included farmers, representatives of grassroots organizations, NGO staff, extension services and various levels of government.

Several recommendations emerged from the national gathering, which included the need to:
- Support native seed saving networks between and among indigenous organizations, and promote community seed fairs in the regions;
- Carry out annual gatherings on biodiversity and local seeds;
- Disseminate information on the dangers of the use of genetically-modified seeds;
- Fight for the recognition of our indigenous territories and preserve natural ecosystems;
- Develop a law for the protection of our biodiversity and native seeds;
- Develop certification and community guarantees for the organic production of seeds;
- Conserve and use our diverse native varieties, through seed production at the family and community levels;
- Strengthen local breeding and selection of native seeds;
- Promote plant-breeding wisdom and indigenous knowledge in the national education system.

PRODII supports farmer-led processing and marketing of oca and other local crops in northern Potosí. Kawsay works with communities across Bolivia through an educational program in defence of indigenous cultures and rights.
NEW PUBLICATIONS AND RESOURCES

From Seeds of Survival to Seeds of Resilience: An International Gathering for Seed and Food Sovereignty. Summary: This CD summarises the workshops, presentations and pictures from the international gathering held in Ethiopia, organized by USC Canada and Ethio-Organic Seed Action (EOSA), October 30 to November 11 2006. If you would like a copy, please contact USC Canada by email at sos@usc-canada.org.

Food Sovereignty and Uncultivated Biodiversity in South Asia: Essays on the Poverty of Food Policy and the Wealth of the Social Landscape. Authors: Farhad Mazhar, Daniel Buckles, P.V. Satheesh, and Farida Akhter. Academic Foundation/IDRC, 2007. Available online at: http://www.idrc.ca/en/ev-107905-201-1-DO_TOPIC.html. Summary: "Based on extensive field research in India and Bangladesh, with and by farming communities, the book offers both people-based and evidence-based perspectives on the value of ecological farming, the survival strategies of the very poor, and the ongoing contribution of biodiversity to livelihoods. It also introduces new concepts such as "the social landscape" and "the ethical relations underlying production systems" relevant to key debates concerning the cultural politics of food sovereignty, land tenure, and the economics of food systems. [...] The print edition of this publication includes a DVD entitled Diversity and Food Sovereignty, which presents three farmer-made films [....]" (from book description).


Two studies on gender, trade and food sovereignty published in 2007 by the Institute for Agriculture and Trade Policy (IATP) and the International Gender and Trade Network (IGTN):

- Case studies highlighting the gendered dynamic around agriculture, trade and food sovereignty. Available online at: http://www.tradeobservatory.org/library.cfm?RefID=97620

Two critiques of the new Green Revolution for Africa:


**Summary**: This issue includes numerous articles on community seed-saving in various countries.

**READER COMMENTS**

We welcome your comments about the articles and general content of the newsletter.

Send your comments to sos@usc-canada.org. Please let us know if we can include your name and comments in the next issue.