The theme of Jottings this year emerges from a growing and welcome realization that our work on seed and food security is contributing to broader social change. Seeds grow community and they grow democracy. While engaging local, regional, and national governments in the development of robust seed and food systems, we’re also helping build civil society leadership.

We begin with a story from Ethiopia, where the government has used a Seeds of Survival model to independently build eight seed banks, and it has engaged our partner there, EOSA, to help set up and maintain them.

In Honduras, thanks to the skilled work of our partner FIPAH, farmer-researcher teams have inspired a government endorsed, nation-wide release and distribution of two climate-resilient bean varieties. Women in this program have also emerged as capable leaders, taking their rightful place in community decision-making.

In Asia’s youngest and most fragile democracy – Timor Leste – USC Canada’s mentoring of our local office leaders means that the Timor Leste office will soon transform into an independent Timorese NGO. They are strong and uniquely positioned to advance seed and food security in a country where hunger is all too common.

We’re also proud to announce our new seed security program in Canada with a special grant from The W. Garfield Weston Foundation; its farmer-led, regional seed systems will promote adapted and diverse seed for Canadian landscapes.

Your vote of confidence in the farming communities we work with is also breeding a citizenship that begins with respect for all living matter. Not least among these are farmers, who bring to life the first and most precious packet of genetic resources – seeds.

Susie Walsh, Executive Director

Photo: Dana Stiev

Farmer Researchers from CIAL San Cristóbal in Honduras.
What do coffee, world-class distance runners and our 3.2 million year-old ancestor “Lucy” all have in common? All come from Ethiopia, of course! Ethiopia is an ancient and uniquely diverse country, its many gifts spread to all corners of the world.

Ethiopia is also the birthplace of USC Canada’s Seeds of Survival (SoS). Launched in 1989 in the wake of one of the world’s worst famines, SoS is the basis of all our programming around the world, and has inspired similar initiatives in over 29 countries.

After two decades, steady and persistent work of SoS farmers in Ethiopia is reaching a tipping point. We’re starting to see the country adopt this approach more widely to address its long-term food and seed security needs. The spread of Community Seed Banks (CSBs) has been key.

CSBs are farmer-run institutions where local collections of all adaptable seeds are stored and exchanged. They are also focal points for participatory varietal selection, where farmers and scientists work together to assess the adaptability of new crops and varieties, select the ones that best meet farmers’ needs, and distribute them widely. This constantly increases valuable diversity and resilience.

A recent survey by Ethio-Organic Seed Action (EOSA), our Ethiopian partner since 2002, is revealing of the impact of CSBs. Of 750 member households from three Community Seed Banks, over 60% were considered to be both highly food and seed secure, never having to face shortages. Moreover, another 30% only rarely did.

Experience has shown that the more types of seeds that farmers have access to, the better chance of successful harvest and continuing seed adaptation—so necessary in our changing global climate.

But perhaps the most exciting development is the growing recognition and spread of SoS beyond the communities where we work, which are all in the northern Wollo district.
In the South, the regional government has recently – and independently – used the SoS model to establish eight new community seed banks, built entirely with public funds. They’ve engaged EOSA to provide technical advice and training to farmers and government extension workers. Similar plans are underway just west of the capital, Addis Ababa, where EOSA is providing training to a local environmental NGO called MELCA.

This work is reaching even deeper levels, involving research and academic institutions. The Kulumsa Agricultural Research centre is now evaluating CSB-farmer-selected durum wheat varieties for resistance to Ug99 – a disease that continues to devastate wheat crops in many countries. In the north, Wollo University is integrating the knowledge of local farmers into its curriculum. They have established a participatory varietal selection initiative in which farmers and students work together to assess the qualities of different varieties.

Back in 1989, many agronomists, development workers, and decision-makers thought that working to reintroduce and promote traditional farmers’ varieties was a waste of time. They thought the future was in modern “Green Revolution” technologies imported from the West. But the steady work of farmers has led to tangible local results. And it’s these results that are bringing more and more farmers and scientists in Ethiopia to work together, building what might just be the beginning of a national movement.

Students from Wollo University weeding the study site planted with different durum wheat varieties. They are preparing for a field day with farmers, students, and faculty to select varieties with preferred traits.
CULTIVATING BEANS, RAISING RIGHTS

Honduras, a country of lush jungles, breathtaking hill country, and diverse ecosystems, was given a disturbing environmental assessment in the mid 1990s:

“While biodiversity in Honduras is among the least inventoried in Central America, the few available figures illustrate that there should be no doubt as to its significance nor to the degree of threat it faces.”

(Global Environment Facility)

Almost two decades later, biodiversity data are still sorely lacking. In the hillside communities where USC Canada works, however, small farmers have not been waiting. With the support of USC Canada’s local partner FIPAH (The Foundation for Participatory Research with Honduran Farmers), farmer research teams called CIALs have been painstakingly cultivating new bean and maize varieties to reclaim lost diversity of the plant genetic resources so crucial to their food security. And they’re beginning to see the results of their work, not only in their fields but also as a right and responsibility at the national level.

In the early ‘90s, FIPAH began working with poor rural communities, supporting participatory farmer research and innovation in an effort to help small farmers conserve and use local seeds, reclaiming the heritage of their agricultural biodiversity, and ultimately providing a sustainable way for rural communities to feed their families.

At a regional gathering in December 2011, in the town of Vallecillo, Alonzo Gutierrez, leader of the CIAL from the community of San José de la Mora, was ready to make an important presentation. The results of his CIAL’s five years of hard work lay in the palm of his hand – a new red bean variety they proudly named San José.

Alonzo explained how the research process had evaluated San José in different growing cycles, adapting over five years not only in their fields but also as a right and responsibility at the national level.

For hundreds of generations, Honduran farmers saved and used their native seeds, expanding the biodiversity of their food crops with each growing season. It was strategic and sustainable agricultural production.

However, over the last two centuries, agriculture in Honduras has been increasingly drawn into the large scale industrial model, concentrating on only a handful of valuable export monocrops, such as banana. Today, it dominates the country’s fertile coastal plains. The arrival of the so-called Green Revolution in the 1970s further undermined local plant genetic resources with the spread and use of “improved” imported seed. The resulting demise of diversity has paralleled a decline in food security and the ability of many Hondurans to feed themselves.

The Chepe bean variety is named in tribute to Jose Santos (nicknamed Chepe), a farmer from La Esperanza who spread the variety to over 10 communities.
CIAL members participate in the selection process for bean varieties.

This is not a unique case of farmer science in action. In April 2012, CIALs from the Yoro district made their own announcement: the release of a new bio-fortified bean variety they named Chepe, after a local farmer. Five years of hard work, participatory breeding and selection in 10 communities had produced this bean variety – valuable for its high iron and zinc content, colour, and cooking time. Chepe also has good yields and resistance to major diseases particular to bean crops of intermediate and high hillside conditions.

While this field-level work is crucial, so is complementary advocacy work at the national level, because small farmers’ face yet another potential and daunting challenge: access to their own plant genetic resources.

Commercial plant breeders have been establishing patent rights on the new varieties they develop – taking freely from native plant genetic materials. This could seriously jeopardize farmer rights to traditional seed-saving and free exchanges, or even the use of their own seeds.

Over the last year, FIPAH held several events directed at raising awareness about these issues. As a direct result, the government of Honduras convened the National Committee on Plant Genetic Resources of Honduras (CONAREFIH) with the principal mandate to: “Contribute to food security and sovereignty for the well-being of Honduran society while promoting the management, conservation and use of plant genetic resources for food and agriculture.”

This committee will undertake a national-level analysis to examine the state of plant genetic resources in Honduras and to meet obligations to the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), which Honduras has already signed and ratified.

The farmers’ fields where the two new bean varieties – San José and Chepe – were born may seem very far away from government offices and treaty negotiations; but as well as feeding people, these beans also carry the symbol of a priceless legacy – and a battle for small farmer rights that must carry on.

Alonzo Gutierrez, whose CIAL bred the San José bean variety, also grows a diversity of crops, including coffee, shown here.
The number of countries where you’ll find our Seeds of Survival program is expanding this year to 11. The newest addition may come as a surprise – Canada!

Our year-long Canadian pilot program, which began in 2011, produced a discovery: Canada has much to learn from farmers in small communities in the global south. The kind of work we promote overseas to conserve and promote seed-saving and diversity is just as necessary right here Canada.

As we know through our work overseas, maintaining a diversity of crops in the fields is essential for maintaining healthy farm ecosystems and protecting against crop losses due to disease or pests. The genetic diversity of the seeds themselves is crucial for climate adaptation and local food security. This diversity is at risk in Canada.

While we can take great pride in the public breeding programs that gave rise to our international reputation for high-quality grains, the commercial focus of our agricultural system has also caused some losses. Large-scale production of a handful of varieties of a few commercial crops is the backbone of Canada’s agricultural system. Breeding for yield, uniformity, and performance under controlled conditions has caused a narrowing of genetic diversity and a decrease in nutritional value of our food crops as well.

And surprising too is that Canadian farmers who want to grow biodiverse vegetables and grains often need to purchase seeds from the US, Europe, or further afield.

The challenge of this program is straightforward: bring diversity back into the system!

A small but committed movement of Canadian farmers, seed growers, and activists has been working for years to conserve Canada’s seed resources. As the local food movement has been growing across this country, so too has the local seed movement.

We spent the pilot year canvassing the country to understand trends, challenges, and opportunities with seed production and conservation. We witnessed excellent examples...
of some producer-led initiatives to conserve and commercialize ecologically-grown, locally-adapted Canadian seed.

The Bauta Family Initiative on Canadian Seed Security will build on and support these efforts. It will include training, applied research on organic breeding and seed crop production, funds for ecological seed producers, market development initiatives, support for seed libraries, and a seed-specific extension service on the web.

We also made crucial connections with individuals and organizations, and built a sense of national cohesion on seed. The case for support presented to The W. Garfield Weston Foundation was directly informed by the perspectives of hundreds of farmers, gardeners, NGO representatives, researchers, government, and organic industry partners contacted through field visits, interviews, group meetings, and online surveys.

The Bauta Family Initiative on Canadian Seed Security will be nationally coordinated and regionally driven. USC Canada will steer the initiative with Seeds of Diversity Canada as our main national partner. The success of the program will be rooted in collaborating with regional organizations across the country who are equally committed and excited to see this important work advance over the next four years.

For more information visit www.usc-canada.org or contact Jane Rabinowicz at jrabinowicz@usc-canada.org.

THE BAUTA FAMILY INITIATIVE ON CANADIAN SEED SECURITY

The program benefactor of The Bauta Family Initiative on Canadian Seed Security is Gretchen Bauta, long-time environmental conservationist and daughter of W. Garfield Weston.

Mrs. Bauta made her first contribution to seed security in Canada over two decades ago when she was introduced to the important work of Seeds of Diversity Canada. Her passion for seed has been growing ever since, and it is through her championing that the Board of Directors of The W. Garfield Weston Foundation has decided to issue this important grant.
In this newest country in Asia, and one of the poorest, there is a need for local NGOs with a demonstrated capacity to work for positive, transformative change within farming communities.

In the last seven years, with support from USC, the staff of USC Timor Leste has been setting in place the foundation to transform itself into a local Timorese NGO.

They’ve chosen to call themselves RAEBIA, for Resilient Agriculture and Economy through Biodiversity Action. RAEBIA is born of 10 years of action, led by a small dedicated group of Timorese people who carefully built a solid reputation as the only civil society organization in Timor Leste with a focus on agricultural biodiversity. We’re thoroughly delighted to announce that RAEBIA expects to be inaugurated early in 2013, and will continue with program support from USC Canada.

In a relatively short time since 2005, the Timor Leste program has had major impact in the communities where we work. The landscape within the Laclo River basin has changed from one of barren degraded hills into lush and productive soils. Deforested mountainsides have been replanted with native trees. Farmers have increased their food production and multiplied the number of harvests per year, allowing them to earn an income from agriculture. Young people have regained interest and enthusiasm for ecological farming.

In short RAEBIA is building more resilient and food secure communities.

The acronym RAEBIA stands for Resilient Agriculture and Economy through Biodiversity Action, but it also proudly uses the local language. The word “rae” means water, and “bia” means land.

The success of USC Canada’s program in Timor Leste has also gained the attention of neighbouring communities – farmers who are continually asking USC for support because the USC staff team has successfully established itself as a key actor, even beyond the local level.

Using basic tools, work teams have created acres of terraces where they plant a variety of trees, shrubs, and grasses that slow water runoff and prevent erosion; it’s the initial steps in transforming typical barren hillside slopes into healthy soils ready for growing food. Eventually, new growth will generate an accumulation of rich humus, the foundation for a good layer of fertile soil.
At the national level, USC Timor Leste has attracted the attention and support of other international development organizations. The team has been successful in getting additional funding from external funders including the United Nations Food and Agriculture Organization and the Japanese International Cooperation Agency (JICA).

The transformation into an independent national NGO is not only timely, but it will open opportunities for RAEBIA to become much more fully integrated within Timorese civil society and to continue building a country where farming, farmers, and food are at the centre of development policies.

Communities are driving our work in Timor Leste, and it begins with individuals like Juliao da Costa from Kalohan. Doubtful at first, Juliao decided to test out USC Timor Leste’s terracing and soil rehabilitation approach for himself, and is now among the most vocal in his efforts to spread the word. He has become a national farmer activist representing Timor Leste in the global Via Campesina movement.

The farm of Aquelino and Geomar da Cunha is a great example of how hillsides of poor, stony soil can be turned into a highly productive home garden. In fact, here trees planted along terraces have grown so dense the family is making good income from selling cuttings as planting materials.

A time to celebrate! Mateus Soares Maia (USC Timor Leste), Lise Latremouille (USC Canada), Xisto Martins (USC Timor Leste), and Awegechew Teshome (USC Canada) in Timor Leste, 2012.
The discovery of this plant sparked a dynamic discussion as the Douentza farmers told stories of sorghum plants in their own fields with multiple seed heads. Such reports have been met with great skepticism from government agricultural extension workers who claim this diversification is not possible, discrediting farmer experience and expertise.

Because the Burkina farmer had brought the entire plant to the gene bank, there was now incontestable proof. Without the gene bank, the farmer wouldn’t have had a place to showcase this remarkable plant. The seed heads might have been removed and the seeds used – and evidence and conservation of this kind of diversity could easily have been lost!

The communities supported by APN have built nine gene and seed banks in Soum Province. The next step is to improve networking between the banks. To that end, a farmer exchange was arranged with Community Seed Bank (CSB) members from Douentza, Mali, where over 20 years of experience has produced community seed bank networks at the village, commune, and regional levels.

A recent highlight from the exchange, during a visit to the CSB in Bouro, involved the discovery of a sorghum plant with an astounding 11 seed heads, each one exhibiting different traits – a marvelous and useful way of responding to environmental stress. USC Canada’s Senior Program Specialist, Awegechew Teshome, was visiting and exclaimed he had never seen a sorghum plant with so many heads and of such variety. Anything more than three heads is considered out of the ordinary.

Last November, six farmers from Mali joined 18 CSB managers from Soum for three days of farmer discussion. Meeting in and around Djibo, Burkina Faso, they shared ideas, mutual discoveries, and presentations of program activities.

Along with the finer details of seed saving, seed storage, and CSB management, they explored how farmers can network locally and regionally, raising a vision of a seed-sharing network across the entire western Sahel region.

usc Canada’s local partner in Burkina Faso, APN-Sahel (Association for the Protection of Nature in the Sahel), is a leader in land rehabilitation and ecological agriculture. After over a decade of partnership with USC, APN has amassed solid expertise around seed security and community seed and gene banks.

Paul Sawadogo (right) gives a tour of a collective market garden in Bouro to visiting farmers and collaborators from Mali, Burkina Faso, and Canada.
ENGAGING YOUTH: BOLIVIA

USC Canada’s partner, PRODII, supports university agronomy students in conducting research on the conservation of agro-biodiversity resources, many of which have been lost. One student, Fidel Inocente Pari, has been researching ways to propagate lemon verbena (Aloysia triphylla) – an herb native to the Bolivian High Andes. Fidel’s work, conducted in Bustillo Province (Potosí) will support farmers who harvest wild herbs like lemon verbena, camomile, and fennel, and process them into tea products that can then be sold in local or national markets. PRODII hopes to foster more young agricultural researchers like Fidel.

Fidel Inocente Pari’s research on lemon verbena – a native Bolivian herb – will help farmers who grow the crop to make and sell tea products.

GENDER EQUALITY AWARENESS: BANGLADESH

Promoting gender equality and raising awareness on gender has been central to the program in Bangladesh. As part of its ongoing work, *USC Bangladesh (USCC-B) and its partner NGOs conducted participatory community gender analysis sessions in 18 communities – involving men and women of all ages. USCC-B provided orientation and support to partner NGOs who then facilitated a process to identify and analyze areas of gender inequality and engaged community level discussions to identify ways of improving the situation.*

*Dulali Begum from the village of Kochubari Kristapun received skills training from our partners in Bangladesh and returned home to share her new knowledge. Planting yard-long beans, the men and women of the family work side-by-side to diversify crops on their small family farm.*

SUPPORT FOR SMALL FARMER MARKETS: NEPAL

We have a new partnership in Nepal – with the Machhapuchhare Development Organization (MDO).

This comes out of the success of a small pilot project with USC-Asia in 2011/12. The project will help increase income for 200 families in two communities, through the promotion of organic vegetable farming. Organic produce will find a ready market in nearby Pokhara. A USC-Asia-funded Bachelor of Agriculture graduate has already been placed in the community to help facilitate training and follow-up on organic techniques.

*This is the first year farmers from Panchese community in central Nepal are growing vegetables organically, using methods that repair soils, and boost health and income.*
I like USC because it’s bold and courageous. It’s patient, giving projects and relationships the time they need to flower. Everyone in the organization gives 110 per cent to make sure the trust of taxpayers and individual donors is always repaid with improved environments that benefit the planet and food improvements that support healthy communities into the future. A pledge will be the best New Year’s resolution you or I can make.

**Wayne Roberts**  
*Author, activist, and one of Canada’s most dynamic food writers*

I recently had the opportunity to travel to Honduras to witness the work USC Canada is doing there, and I’ve come out of that trip with my belief in them renewed and redoubled. Their Seeds of Survival program there, with wonderful local partner FIPAH, is improving people’s lives in all the best ways: sustainably, scientifically, and all on their own terms, using their geography, their history, their culture, their strengths.

**Tim Baker**  
*Lead singer of Juno-nominated band, Hey Rosetta!*

I support USC because of the emphasis that USC puts on seeds in agricultural systems, and how USC’s projects fundamentally change individuals and communities throughout the world.

**Daniel Brisebois**  
*Seed Farmer*

It doesn’t take a miracle to tackle poverty and social injustice. It takes the will and resilience of people determined to make a better future for themselves. The respect and support USC Canada offers to small farmers in the world’s most difficult environments is helping them rebuild their confidence in the farming methods that have sustained communities for generations.

**Bruce Cockburn**  
*Juno-award-winning Singer and Songwriter*

I love USC! You combine commanding knowledge and compassionate ingenuity. You combine clarity of vision and strategic intervention. You are among the most professional and hardworking folks I know I will ever meet. Please know you have my full confidence and gratitude for the difference you are making in so many lives.

**Frances Moore Lappé**  
*Author, democracy advocate, and world food and hunger expert*

**HELP SPREAD THE SEEDS OF SURVIVAL DONATE TODAY**

As you’ve seen throughout this issue of Jottings, Seeds of Survival is taking root and growing – not only in the communities we support, but in neighbouring communities and beyond. But we can’t continue this kind of success without your help. Please donate today.

- Donate online. It’s easy, fast, safe and secure.  
  [www.usc-canada.org/donate-now](http://www.usc-canada.org/donate-now)
- Call our toll-free number: 1-800-565-6872
- Mail your cheque to USC Canada, 56 Sparks Street, Suite 705, Ottawa, Ontario K1P 5B1

Under the oversight of a volunteer/international Board of Directors, our ground-breaking Seeds of Survival program is managed by a core staff of 20 professionals in Canada and committed partners in Asia, Latin America, Africa and Canada.