

Integrating Farmers' Seeds System into the Market: “What do we gain? What do we lose? What do we do?”

Meeting of Experts – Synthesis Report
Ho Chi Minh City, Vietnam, 12 and 13 November 2012

The meeting of experts was a rare opportunity for representatives of civil society organizations and the private seed sector to explore common objectives for integrating seeds produced by farmers into the market. The consultation sought to identify models of market engagement and public-private partnership, which could potentially contribute to the design of pilot projects.

The 21 expert participants represented 13 organizations from Africa, Asia, Europe, Latin and North America. Participants shared their understanding of the problems, defined the opportunities and potential risks, but did not necessarily seek consensus on the positions. The meeting invoked the Chatham House Rule: where people spoke from their individual expertise.

There was a consensus that engaging with farmers to produce seeds for the market demands a long-term commitment from all sides. Communication and perception management are important first steps towards collaboration. All parties agreed that providing farmers with a wide range of seed choices, and enabling them to independently decide should result in sustainable outcomes. All the participants have a common interest in good governance to ensure that the quality of seeds is maintained and enhanced and that reliable breeding materials remain available. Monopolies on intellectual property rights (IPR) undermine the interests of all parties. They stifle innovation and contribute to food insecurity. Concrete steps and activities are needed to incorporate the knowledge and experiences of all parties. Potential pilot projects were identified in Zimbabwe and Peru; as were other explorations in e.g. Myanmar. Further dialogue and partnerships with the private sector will be actively sought. For example,

participants suggested a dialogue involving farmers, civil societies, seed companies, the financial sector, governments and UN agencies to find food security enhancing solutions to problems around IPR.

Background

Today one in eight people around the world live in poverty. Factors such as high food prices are fuelling a food crisis. Our global food system is vulnerable, as a result of e.g. relying mainly on only four plant species (wheat, maize, rice, potato). This narrow genetic base contributes 60% of the calories in our diet. Climate change demands that we start using a wide range of plants and varieties that are more resistant to pests and diseases, and able to adapt to changing conditions, such as rising soil salinity, more droughts and more flooding.



Courtesy of Candace Feit/Oxfam Novib

Seed security is vital to food security. Most of the world's food is produced and consumed in smallholder communities. In Africa for example, over 80% of the seeds are from the informal systems¹. Farmers use the harvested seeds from their own fields; and exchange with other farmers. The formal seed system is usually focussed on their wide adaptation. The system does not usually target highly diverse,

¹ African Union 2008; Byerlee et al. 2007

complex and marginal conditions. This is made worse by a lack of infrastructure to ensure the timely supply of quality seeds.

Smallholder farmers play a vital role in biodiversity management and in conservation. They create the conditions for stronger farming systems and for the continuous adaptation of crops to changing environments.

The “informal” seed systems of smallholders are dynamic and flexible. But they also face problems, such as seed purity, health and degeneration, and unstable yields. They lack access to breeding materials, good quality seeds and markets. In contrast, seed companies have access to high-quality breeding materials and varieties, have the technical and commercial expertise, and access to markets.

Sharing experiences from the fields

Over the past 15 years farmers, civil society organizations and research institutes have engaged in participatory plant breeding (PPB). This is an empowering approach to help farmers to conserve and improve traditional varieties, cross new varieties, produce good quality seeds, and engage in policy reforms to improve seed systems. This approach, practiced by partners of Oxfam Novib, has successfully achieved scale. For example, **SEARICE**² and its partner **FARES**³ have reached about 75,000 farming households in Vietnam, supplying 7% of the national demand for rice seeds. In countries where the formal seed system has collapsed the role of civil society becomes important. In Zimbabwe, **CTDT**⁴ is the main source of seeds in the communities where it works. The **Asociación Andes** in Peru has built the capacity of indigenous communities to manage 1,345 varieties of potato on bio-cultural territory, i.e. in a manner that also reflects the cultural and territorial rights of these communities.

² South East Asian Regional Initiative for Community Empowerment

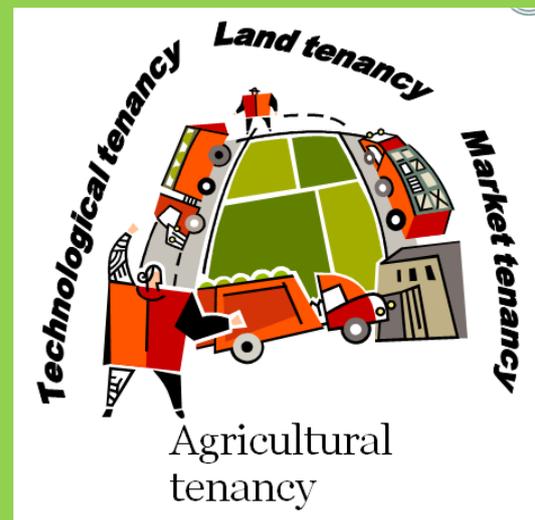
³ Strengthening Farmer-Agricultural Research and Extension System Partnership

⁴ Community Technology Development Trust

Tenancy arrangements in agriculture

There are three kinds of tenancy in agriculture: land tenancy, technological tenancy and market tenancy. Unequal access to land and resources perpetuate poverty. Farmers need access to land, technology and the market, and need a measure of control over them. Civil society organization, such as the partners of Oxfam Novib, implements participatory plant breeding to help empower farmers to gain control over seed technologies and their farming systems.

The marketing of products can be steered to affect tenancy relations to the farmers' benefit. Marketing takes many forms. It can be small and medium-sized enterprises, may be led by farmers, or be done in partnership with other enterprises.



Courtesy of SEARICE

Success is not limited to traditional and improved varieties. At the meeting of experts, **PAR**⁵ reported the production of four open pollen maize varieties and a hybrid maize variety in Southwest China, where it runs a participatory plant breeding programme. PAR reported that their hybrid has increased productivity by 15 to 30%, due to its drought and pest-resistant properties. It has generated higher incomes for local farmers and improved their food security. In 2006 the communities began producing the PPB hybrid variety, and farmers now have their own

⁵ Participatory Action Research

hybrid parent lines. The hybrid maize and newly developed potato and rice varieties are crucial in dealing with extreme weather, such as the big spring drought of 2010.

East-West Seeds presented a different model. It gives advice on improving the profitability of vegetable production. It aims to increase

farmers' awareness of the financial and agronomic benefits of using high-quality seeds in combination with production and post-harvest techniques. The majority of East-West Seeds' clients are smallholder farmers living in poverty. Their access to seeds is assured by

selling hybrid and modern seeds in small, affordable packs costing less than one US dollar. The packs are sold to over 10 million smallholders each year. Many of them are women, who use these seeds to grow crops for family consumption and for the market. Rather than developing 'one global product', East-West Seeds adapts the packs, training and support to the diverse agro-climatic conditions of its clients. Their experience in Cambodia shows that every additional dollar spent on hybrid cucumber seeds makes the farmer an additional 11 dollar in income, compared to using a local variety.

Shared perspectives and potential for collaboration

The two-day discussion in Ho Chi Minh City generated insights and ideas on collaboration.

Long term commitment

Private, civil society and farmers' organizations are committed to the long-term engagement in the seeds sector. Social

stability in rural economies is in the long-term interest of seeds companies. Ideally, improved livelihoods and development opportunities generate higher incomes for farmers, which raise farmers' power to purchase quality seeds, and thus the demands for seeds adapted to the diverse agro-ecologies.



Slide of concluding meeting with shared objectives.

Without profit incentives the private sector is unlikely to engage extensively in activities aimed at improving farmers' seeds system. Nevertheless, payments in kind for high-quality breeding materials are an option, including training farmers in crossing and producing seeds.

Civil society organizations are more likely to engage in market development when access and benefits are more equitable for the farmers.

Finding market niches

When farmers make the transition from subsistence to market agriculture, it is possible to identify areas of common interest. Cooperation with seed companies could be about developing crops with commercial potential; or about crop diversification in agro-eco systems based on Neglected and Underutilized Species (NUS), such as millet.

Increasing choices for farmers

Project activities should provide farmers with all possible options. Empowering farmers to decide independently on the most appropriate crops and seed varieties should result in more sustainable outcomes. Integrating farmers' seeds into the market are about diversifying livelihoods, and not about raising dependence on market forces. The objective is to enhance the resilience of farmers' seeds production

and exchange mechanisms; it is not to replace them.

Increasing diversity

The sale of standardized seeds often leads to a loss of diversity, and thus may lead to a loss of breeding materials for both farmers and seed companies. However, the experiences of civil society with participatory plant breeding provide alternative models for maintaining diversity in the field. More attention needs to be paid to the complementary roles of *in situ* and *ex situ* conservation, and putting them in practice. Ultimately, increase market participation of the farmers should improve food security. This should also serve to broaden the genetic base of our global food system, and improve access to genetic diversity for purposes of conservation and plant breeding.



A woman managing about 300 varieties in the Potato Park, Peru. Courtesy of Oxfam Novib

Seed governance

Civil society organizations and the private sector have a common interest in good governance to ensure that the quality of seeds is maintained and enhanced, and that reliable breeding materials remain available.



Rice variety NV1, produced as part of the 'Strengthening Farmer-Agricultural Research and Extension System Partnership' (FARES) and certified by the Vietnamese Ministry of Agriculture. Courtesy FARES

Testing plants on *distinctness, uniformity and stability* (DUS) is a basic condition for obtaining *Plant Breeders' Rights* (PBR) or inclusion on the *national list* of varieties that meet the basic conditions for marketing. Two of the varieties from the participatory plant breeding work of *SEARICE and FARES* have passed the DUS test and have been successfully registered. However, DUS testing can be time-consuming and expensive, and may be inappropriate for farmers' seeds. Quality guarantees rather than quality control are likely more appropriate for protecting farmers from buying counterfeit seeds. Regulatory changes are needed to enable a wider participation in and support for a decentralized quality guarantee system for domestic markets.

Intellectual Property Rights

IPR monopolies undermine the interests of all parties. Monopolies stifle innovation and increase food insecurity. Still, IPR are important for the operations of the private sector. All participants of the meeting of experts agreed that the complexities of IPR issues cannot be solved easily. This consultation or future collaboration will not be enough. However, it is vital that farmers have the freedom to cross, produce, propagate, distribute and sell seeds. The sharing of information on IPR, on international seed policies and on national laws, is important. This is needed to overcome misunderstandings on the role of IPR in seed

development in the formal and informal sectors. It also matters that civil society organizations develop and pilot concrete alternatives to IPR. One such alternative is an open source system (see box bellows).

Moving beyond the rhetoric

Concrete steps and activities are needed to deal with the learning curve that all parties face. Zimbabwe and Peru, for example, were identified as potential locations for pilots. Other potential pilots in Myanmar, China and Pakistan will be explored. Inputs and partnerships will be actively explored with the private sector.

Open Source Seed Initiative

The **Open Source Seed Initiative (OSSI)** from the USA suggests an alternative IPR system. It explores ways in which analogous 'biological open source' arrangements can be developed for plant germplasm. This approach could facilitate access to parent materials and pre-breeding materials, from which farmers could develop new varieties. OSSI was set up to facilitate innovation in plant breeding by creating a licensing framework for exchanging germplasm, thus preserving the right to the unhindered use of shared seeds and their progeny in subsequent breeding programs.

Respectful and open communications

Communication and perception management are important first steps towards collaboration. The participants suggested a dialogue between farmers, civil societies, private companies, the financial sector, government and UN agencies to find food security enhancing solutions to problems around IPR. False perceptions of contradicting

interests in the formal and informal seeds sectors are a major obstacle to developing appropriate solutions. Collaboration or similarities in objectives are not always necessary, but an open dialogue improves understanding. Each party has its own area of expertise from which everyone can benefit, and which supports the common objective of empowering farmers for food security.



Farmer presenting hybrid cucumber.
Courtesy of East-West Seed

The expert participants said the consultation achieved a milestone in gaining a better understanding through respectful communication and an open dialogue between the private sector and civil society organizations. Everyone agreed to capitalize on this, with Oxfam Novib taking the lead.

Inputs for discussion

<p>1. <i>‘Challenges in Marketing Farmers’ Seeds: A potential approach for small farmers in developing countries’ by Alejandro Argumedo and Renato Salazar.</i> The paper explores various forms of Farmers’ Seed Enterprises (FSEs), from contract growing to marketing cooperatives. It examines the challenges of marketing seeds, including the production chain and business management, quality standards, capital, operation, infrastructure and institutional linkages (i.e. between donors, governments, civil society organizations, the private sector and research communities).</p> <p>FSEs offer alternatives to the conventional seed supply. They can contribute to the needs of smallholder farmers for quality seeds in marginal areas and in high potential areas with high rates of genetic erosion. FSEs can help in the diffusion of seeds that are self, open and vegetatively bred. While FSEs do not typically meet the scale requirements of commercial interest, FSEs can have a strong local demand or potential. FSEs can also have a role in producing and selling hybrid seeds for farmers who cannot afford the associated cost and risk, but for whom hybrid seeds provide useful options. FSEs can enhance the diffusion of farmers’ seeds through marketing, facilitate conservation by broadening the genetic base of crops for food security and strengthen the role of farmers in plant genetic resource management.</p> <p>2. <i>‘Intellectual Property Rights (IPR) and Marketing Farmers’ Seeds: a potential approach for small-farmers in developing countries’ by Renato Salazar.</i> This paper argues that the rights to natural resources and the associated knowledge and technologies are basic human rights related to the right to food. Intellectual property rights represent a major dilemma when (a) they become monopolistic and hinder innovation of farmers as well as for public and private research organizations; and (b) they hinder farmers’ rights and food security. In this unequal world of uneven development, most of the patents are granted to industries from rich countries. Farmers and civil society organizations are often faced with a classic dilemma that what they may believe to be highly immoral, is actually legal. Countries are under heavy pressure to adopt the same IPR rules.</p>	<p>Market engagements for farmers’ seeds inevitably challenge their freedom to operate. The paper advocates respect for existing IPR regimes to guide the operations of FSEs. This is needed in order not to undermine social and state institutions and move societies forward. The paper, however, advocates stronger effort to reform IPR systems, e.g. against monopolies. At the same time the paper also points out that research and farmers’ exemptions in plant breeding rights can be actively used by FSEs to further market integration. The paper encourages the exploration of alternative IPR frameworks for innovation and plant breeding, such as ‘open-source’ systems. Such alternative IPR may be particularly suited to public plant breeding institutions whose products are mainly for public use.</p> <p>3. <i>‘Plant Breeding, How to protect rights’ by Anke van der Hurk.</i> The presentation emphasizes that a farmer can breed a protected variety without the right-holder’s permission, so long as the new variety is not too closely related to the original, protected variety. This is in accordance with UPOV 1991, and is referred to as the “breeders’ exemption”.</p> <p>The paper also emphasizes that UPOV 1991 includes an optional provision that is known as the "farmers’ privilege". This provision recognizes that, for some crops, there is the common practice of farmers saving their own seed, i.e. seed is produced on a farm for the purpose of re-sowing on the same farm and not for the purpose of selling the seed. The provision allows each Union member to take account of this practice when protecting varieties. However, the purpose of protecting plant variety is to encourage the development of new varieties, for the benefit of society. Therefore, UPOV 1991 requires that the farmers’ privilege be regulated within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder. It is up to the national legislators to implement this in a manner that is realistic and workable for both farmers and breeders. It is important to (a) understand the needs and concerns related to farmers’ seed production and marketing of farmers’ seed, and (b) overcome controversies over the (adverse) impacts of rules and legislation on the development of new varieties by farmers.</p>
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List of participants

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	Anita Dohar Robin Pistorius (Consultant)	GIZ, Vietnam	Georg Heichert
	Renato Salazar (Consultant) Lilian dela Vega (Facilitator)	PAR, China	Yiching Song
CTDT, Zimbabwe	Patrick Kasasa Andrew Mushita	Open Source Seed Initiative, USA	Adrienne Shelton
Andes, Peru	Alejandro Argumedo	East-West Seed, Myanmar	Stuart Joseph Morris
SEARICE	Joy Doctor	Oxfam Pakistan	Syed Iqbal Ahmad
CGN (Centre for Genetic Resources), Netherlands	Martin Brink	Metta Development Foundation	Khin Maung Latt
		Mekong Delta Research and Development Institute, Vietnam	Huynh Quang Tin