World Seed Project

1. Introduction

Quality seeds of adapted and improved varieties are the most important technology required for improving crop productivity and ensuring food security in developing countries. Adapted and improved crop varieties available to farmers at the right time will make a significant contribution to the yield increase necessary to meet the demands of a growing global population. High quality seeds of adapted and improved varieties are essential to:

- Increase the efficiency in use of nutrients and water;
- Increase resistance to insect pests and diseases, and provide greater tolerance to drought, flood, frost and higher temperatures associated with climate change;
- Improve nutritional value and quality;
- Improve provision of ecosystem services.

2. Purpose

The aim of the World Seed Project (WSP) is to address farmers' access to quality seed of new varieties through an innovative partnership. This partnership will facilitate the development of new plant varieties and the delivery of high quality seed of those varieties to farmers to increase crop productivity, food security and economic development. It will contribute to the achievement of Millennium Development Goal One (i.e. eradicating extreme poverty and hunger). Through the combined efforts of the Food and Agriculture Organization of the United Nations (FAO), the International Seed Federation (ISF), the International Seed Testing Association (ISTA), the Organisation for Economic Cooperation and Development (OECD) Seed Schemes and the International Union for the Protection of New Varieties of Plants (UPOV), the project will assist the targeted countries in the development and implementation of a regulatory framework for sustainable development of the seed sector.

Countries participating in the WSP will be identified on the basis that the project is fully compatible with their vision for the development of a seed supply system that can respond to the challenges facing their agricultural sector.

3. Deliverables

Through this innovative approach, the use of partnerships and the full involvement of the national institutional framework, the WSP will create the following outcomes:

3.1 An appropriate and effective seed regulatory framework and other related elements (FAO)

Key constraints in the development and delivery of improved varieties are inadequate policy and a poor regulatory environment. The WSP will: (i) provide advice and facilitate development, as identified in the gap analysis, of national seed legislation, regulation and policy, as well as seed industry development strategy/plans and a national plant genetic resources strategy; (ii) provide assessment, assistance, capacity building and awareness raising on seed legislation, policy and statistics as well as biosafety; and (iii) improve seed related phytosanitary services.

3.2 An effective system of plant variety protection (UPOV)

Plant variety protection (PVP) provides incentive for the public and private sector to develop new plant varieties suited to the needs of farmers and growers. PVP is a key driver of innovation and technology transfer to farmers. The WSP will: (i) raise awareness of the impact of plant breeder's rights for breeders, farmers and society as a whole; (ii) provide legal guidance for the preparation of a plant variety protection law and assistance in becoming a UPOV member; and (iii) provide training and assistance for the establishment and operation of the plant variety protection system.

3.3 Enhanced seed quality assurance for better in-field performance (ISTA)

Not only are improved varieties necessary but the seed of these varieties must be of high quality. In order to produce quality seed for farmers, effective quality assurance systems need to be in place that facilitate both local seed trade and trade between countries. The WSP will: (i) raise awareness of the importance of seed quality assurance; (ii) provide training of laboratory staff for the application of the ISTA International Rules for Seed Testing; and (iii) assist the laboratory in establishing a quality assurance system conforming to the ISTA Accreditation Standard.

3.4 A reliable and internationally acceptable seed certification system (OECD)

The seed sector can only reach its potential if there is the opportunity for seed trade (both import and export) with neighboring countries. The WSP will: (i) raise awareness of the benefits from using certified seed; (ii) develop a national certification system compatible with international standards and enable the country to become a member of the OECD Seed Schemes; and (iii) develop a legal framework and seed law for production, import and export of high quality seed.

3.5 Growth of the local seed industry to ensure farmers' access to improved varieties and seeds (ISF)

The development of dynamic local seed enterprises is an essential link between the new varieties and getting those varieties into the hands of farmers. This involves not only production of high quality seed but the distribution and marketing of seed to the farmers. A dynamic local seed industry is a critical element for the sustainability of a seed sector. The WSP will: (i) provide training to ensure an effective national seed association that can represent the interests of the breeding and seed sectors at the national and international level; and (ii) support national and international seed trade.

4. Approach

Partnership is a key feature of this project. The lead organization for each of the elements indicated above will coordinate its programs and activities with the other partner organizations through a project management unit. Together the partners FAO, ISF, ISTA, OECD and UPOV have identified the United Republic of Tanzania and Ghana for developing a pilot initiative.

The WSP will address the gaps in the current systems (taking into account technologies and innovations), while complementing existing projects in the country. Delivery of the outcomes will be achieved through technical advice and training for sustainable implementation of the regulatory frameworks, using experts from member States and the WSP organizations. This approach is also aimed at enabling the WSP countries to serve as an example and source of capacity building for other countries.

5. Conclusion

The WSP has a high degree of sustainability because it focuses on an innovative and appropriate regulatory framework coupled with capacity building for the public and private sectors. As farmers adopt the new varieties, this will drive the growth of the seed market that will in turn lead to the development of more new varieties and the growth of local seed enterprises. New varieties, the technology that is most needed by farmers, will be more available to help them increase food production and meet the challenges of climate change. Through existing and new partnerships, the project has high potential to provide an example for other developing countries taking into account the lessons learned from the pilot activities.