



منظمة الأغذية
والزراعة
للأمم المتحدة

联合国
粮食及
农业组织

Food
and
Agriculture
Organization
of
the
United
Nations

Organisation
des
Nations
Unies
pour
l'alimentation
et
l'agriculture

Продовольственная и
сельскохозяйственная
организация
Объединенных
Наций

Organización
de las
Naciones
Unidas
para la
Agricultura
y la
Alimentación

Item 8 of the Provisional Agenda

COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Thirteenth Regular Session

Rome, 18 – 22 July 2011

REPORT FROM THE GLOBAL CROP DIVERSITY TRUST TO THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

TABLE OF CONTENTS

	<i>Para.</i>
I. Introduction	1 - 15
II. Institutional developments	16 - 25
III. Programme developments	26 - 57
IV. Other areas of cooperation	58 - 60
V. Conclusion	61 - 64

I. INTRODUCTION

1. Established in 2004 under international law as an independent international organization, the Global Crop Diversity Trust (the Trust) operates within the framework of the International Treaty on Plant Genetic Resources for Food and Agriculture (the International Treaty) as an essential element of its Funding Strategy and in accordance with the overall policy guidance provided by its Governing Body. The Trust's objective as stated in its Constitution is "*to ensure the long-term conservation and availability of plant genetic resources for food and agriculture with a view to achieving global food security and sustainable agriculture*". The Constitution further states that "*the Trust shall in particular, without prejudice to the generality of the foregoing,*

- *endeavour to safeguard collections of unique and valuable plant genetic resources for food and agriculture held ex situ, with priority being given to those that are plant genetic resources included in Annex I to the International Treaty or referred to in Article 15.1(b) of the International Treaty;*
- *promote an efficient goal-oriented, economically efficient and sustainable global system of ex situ conservation in accordance with the International Treaty and the Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (hereinafter referred to as "the Global Plan of Action");*
- *promote the regeneration, characterization, documentation and evaluation of plant genetic resources for food and agriculture and the exchange of related information;*
- *promote the availability of plant genetic resources for food and agriculture; and*
- *promote national and regional capacity building, including the training of key personnel, with respect to the above."*

2. The Relationship Agreement between the Trust and the Governing Body of the International Treaty recognizes the Trust "*as an essential element of the Funding Strategy of the International Treaty in relation to ex situ conservation and availability of plant genetic resources for food and agriculture*".

3. It also notes that the Trust established an endowment with the objective of "*providing a permanent source of funds to support the long-term conservation of the ex situ germplasm collections on which the world depends for food security*". In this regard, the Agreement highlights the FAO Global Plan of Action's call for the "*development and support of a rational, efficient and sustainable system of genetic resources collections around the world*".

4. The Global Plan of Action recognizes *in situ* and *ex situ* as complementary conservation strategies. The Trust, in accordance with its Constitution and the Relationship Agreement with the Governing Body, focuses on *ex situ* (genebank) conservation and availability of plant genetic resources for food and agriculture. The Trust addresses major portions of the International Treaty, including Articles 5 and 6, and much of Articles 7, 8, 9, 14, 16, 17.

5. The Intergovernmental Technical Working Group on Plant Genetic Resources (Working Group), at its Third Session in 2005, "*stressed the important role of the Trust in supporting the long-term conservation of the world's most strategic germplasm collections, and gave its full support to the development of crop and regional conservation strategies by the Trust*". The Working Group further stated that it "*fully supported and welcomed the technical cooperation among the Trust, FAO and IPGRI, and recommended it be continued and broadened as appropriate*". The Working Group at its Fourth Session in 2009 expressed its appreciation for the important work that is being done by the Trust to advance the conservation and sustainable use of plant genetic resources. At its Fifth Session, the Working Group thanked the Trust for the information provided to it and stressed the need for collaboration between the Commission and the Trust.

6. The Commission on Genetic Resources for Food and Agriculture (Commission), at its Eleventh Session, noted the Trust's success in mobilizing funding for *ex situ* conservation and at its Twelfth Session emphasized “*the need to continue close cooperation with the Global Crop Diversity Trust and the CGIAR and encouraged them to take the Multi-Year Programme of Work into account in the implementation of their respective mandates and agendas*”.

7. The contribution of the Trust's work to the implementation of the International Treaty and to the promotion of food security is directly related to the importance of genebanks and the crop diversity they maintain and provide. *Ex situ* collections/genebanks are critically important and need to be supported in order to ensure future availability of crop diversity and promote sustainable agriculture and food security. The Trust was created to increase funding available for *ex situ* conservation for the following reasons:

- A huge amount of crop diversity is conserved *ex situ*, in genebanks, yet funding is not sufficient to cover even basic conservation costs. Much of this diversity is only found or conserved today in genebank collections, having been lost or displaced from *in situ* collections or on-farm conditions. The first FAO Report (1998) on the State of the World's Plant Genetic Resources concluded that most of the diversity of the major staple crops was now conserved *ex situ*. The total number of accessions worldwide has continued to grow over the last ten years, with this now standing at 7.4 million according to FAO's *Second Report on the State of the World's Plant Genetic Resources for Food and Agriculture* (2010) (SoWPGRFA-2).
- *Ex situ* provides security against many of the threats posed to crop diversity found *in situ*: replacement by modern varieties, by urban development or other changes in land use, and through climate change. The SoWPGRFA-2 reports increased interest in collecting and maintaining crop wild relatives, largely due to risks posed by these threats.
- It is possible to collect and make a huge amount of information available about the diversity held in genebanks, and about the traits contained in individual samples. The Trust is promoting research that will generate even more information about the diversity held in genebanks, and the useful traits it harbours. The Trust is also supporting development of new genebank information systems to enhance the accessibility and utilization of plant genetic resources for food and agriculture (PGRFA) under the International Treaty's Multilateral System for Facilitated Access and Benefit sharing (MLS).
- Genebanks are the main source of crop diversity for both public and private plant breeding efforts as well as for scientific research. Genebanks are very well placed to respond to the principle of interdependence of countries for PGRFA; they facilitate the exchange of resources from distant localities, which is essential to crop improvement programmes, including those aimed at sustaining crop production and climate change adaptation.

8. Climate change will present additional challenges for on-farm management of crop diversity, and will increase the risk of replacement of traditional farmer varieties and, unless there is collection and *ex situ* conservation, of the permanent loss of genetic diversity.

9. Adaptive traits will need to be integrated into existing and/or new planting materials. Because future climates will be so different from existing climates, these appropriate adaptive traits are unlikely to be sourced within a farmer's own planting materials, within the same farm communities, or even from adjacent countries. Indeed, in the case of Africa, few countries today offer analogues for tomorrow's projected climates in Africa (Burke, *et al.*).¹ The traits necessary for climate change adaptation – whether undertaken by farmers or formal sector plant breeders - will therefore in large part need to be sourced remotely from genebank collections where the relevant traits can be identified and accessed.

¹ Burke, Marshall, D. Lobell and L. Guarino. (2009) “Shifts in African Crop Climates by 2050, and Their Implication for Crop Improvement and Genetic Resources Conservation.” *Global Environmental Change*.

10. According to the UN Framework Convention on Climate Change (UNFCCC), many wild species of plants, including crop wild relatives presumably, are expected to become extinct this century.² These genetic resources are likely to contain new and important traits for climate change adaptation. *Ex situ* approaches thus become central to the conservation of crop diversity – domesticated and wild – as a result of various serious threats to diversity now existing *in situ*.

11. Recognizing the threat that climate change poses to PGRFA conservation, the Trust initiated specific work to address the challenges of climate change six years ago. Today, many of the Trust's activities with partners – collecting, screening, information systems, etc. - are aimed at building collective capacity for plant breeders and farmers to breed crops adapted to climate change. So too is the Trust's work to build a strong, secure global genebank conservation system. If diversity is lost, if it exists but its traits are unknown, or if it is legally or practically unavailable, then the options it may contain and the benefits these could provide to farmers and consumers, go unrealized. There are no benefits to be generated or shared. Genebanks offer the world's most potent tool for conserving, researching and providing genetic diversity to help agriculture adapt to climate change, the stark fact that underscores the importance of the Trust's work.

12. Together with Stanford University in 2007, the Trust cosponsored a groundbreaking international gathering of climatologists, plant breeders and genetic resource experts to examine the effects of climate change on agriculture and the implications for management of genebank collections. A second workshop on climate extremes and crop adaptation was held in 2009. And in 2010, Stanford and the Trust brought together experts to examine the role of crop wild relatives in adapting agriculture to climate change. Reports from these meetings are available.³

13. This preparation provided the scientific foundation for a dedicated, focused, goal-oriented Trust programme to get agriculture prepared for climate change and better positioned to strengthen future food security. For example, to date the Trust has sponsored the evaluation of 60 collections of 20 crops for 113 traits of significance to the poor in the context of climate change. This screening has involved 57 different national/regional research institutes and eight CGIAR Centres in 43 countries.

14. As indicated below, these activities have included collection, rescue of threatened genebank accessions through regeneration, screening of targeted collections for important traits, development of information systems for better managing collections and improving visibility and availability to users, basic research to develop better and more cost-effective conservation techniques, and the provision of ongoing support to certain internationally important and highly-accessed collections.

15. The Trust is pleased to submit this report on the activities of the Trust to the Thirteenth Regular Session of the Commission. This report provides an update on both institutional and programme developments within the Trust, in particular regarding its expanding cooperation with other organizations, both national and international, working on the conservation and use of PGRFA.

II. INSTITUTIONAL DEVELOPMENTS

16. The Executive Board of the Global Crop Diversity Trust held its seventh meeting in Rome, in November 2010 and its eighth meeting in June 2011. Dr Margaret Catley-Carlson is Chair of the Board and Prof. Sir Peter Crane is Vice-Chair.

² Feeling the Heat. UNFCCC. http://unfccc.int/essential_background/feeling_the_heat/items/2917.php.

³ http://foodsecurity.stanford.edu/events/conservation_of_crop_genetic_resources_in_the_face_of_climate_change/

http://foodsecurity.stanford.edu/events/climate_extremes_and_crop_adaptation/

17. Two new Board Members were provided by the Governing Body for 2010 and 2011 respectively: Ms Åslaug Haga, former Norwegian Minister of Petroleum and Energy and Minister of Local Municipalities and Regional Development, and leader of the farmers' party in Norway, and Dr Ibrahim Assane Mayaki, CEO of the New Partnership for African Development (NEPAD), and former Prime Minister of Niger.

18. Two new Board Members were also provided by the Trust's Donor Council for 2010 and 2011 respectively: Ambassador Walter Fust, CEO of the Global Humanitarian Forum and past Director of the Swiss Development Corporation, and Mr Roberto Rodrigues, Brazilian agricultural leader, former Minister of Agriculture and former head of the Organization of Brazilian Cooperatives.

19. The number of countries (developed and developing), associations, foundations, and companies that have contributed funds and joined the Trust's Donors' Council is 30. The Council meets annually and provides financial oversight and advice on such matters to the Executive Board. In addition, a number of individuals have contributed to the Trust. The complete list of donors can be found at: www.croptrust.org/main/funds.php. In addition to financial donations, Norway and Sweden have provided associate professional officers to the Trust, and Australia and the Netherlands have seconded senior staff, full-time and part-time respectively.

20. At the eighth meeting of the Executive Board, after much deliberation and a selection process lasting two years, the Board accepted the offer of Germany, the state of North Rhine Westphalia, and the City of Bonn to host the Trust, subject to the successful conclusion of a Headquarters Agreement. The Board is confident that the German offer provides a truly exciting platform for dramatically advancing the mission of the Trust. It gives the Trust greatly expanded accommodations, significant long-term financial support for staff salaries and other operations, and the promise of specific, high-level political support in assisting the Trust in fundraising. These new resources will permit an expansion in the work of the Trust and greater contributions to the implementation of the International Treaty on Plant Genetic Resources.

21. The Board specifically agreed that a primary priority will be to ensure close collaboration with the Commission, the Governing Body and with our Rome-based partners: FAO, IFAD, the Secretariats of the Treaty and Commission, and Bioversity International. Finalization of the Headquarters Agreement and renovation of the offices will take the better part of a year, thus it is not anticipated to physical move to Bonn before June 2012 or later.

22. The Trust has a broad and important mandate consistent with the requirements of the International Treaty and Global Plan of Action, but limited financial resources. Only by taking a goal-oriented and disciplined approach in its disbursements can the Trust achieve its objective. The Trust cannot support all genebanks throughout the world. That would require many billions of dollars in an endowment fund. Thus, the Trust focuses its funding on activities that provide maximum global benefits that are cost-effective, efficient and sustainable. The Trust operates on the basis of a Fund Disbursement Strategy, which was adopted by the Trust's Executive Board in 2009 after consultation with the Governing Body of the International Treaty and Donors. The Funding Strategy can be viewed at: www.croptrust.org/main/governance.php?itemid+79.

23. The Trust has raised a considerable amount of money for its endowment fund for the purpose of providing stable, ongoing financial support to key genebank collections, and currently, the Trust's endowment provides over US\$2 million of funding annually in a sustainable manner. Although this provides a measure of security unmatched in the history of genebanks, the Trust is still far from reaching its endowment goal and the programmatic goals recognized in its Relationship Agreement with the Governing Body and set out for itself in its Constitution and Fund Disbursement Strategy.

24. Full funding of the Trust's endowment would contribute significantly to implementation of the International Treaty. It would secure collections of crop diversity forever, ensuring their

availability to help get agriculture ready for climate change. And, in the long term, it would result in efficiencies and cost savings for national programmes and donor agencies.

25. The Trust thus appeals to countries and donor agencies to summon the political will at the highest level to make the investment needed to secure crop diversity through the Trust's endowment fund.

III. PROGRAMME DEVELOPMENTS

Long-term conservation and availability of crop diversity

26. Article 5.1e of the International Treaty requires that Contracting Parties "*cooperate to promote the development of an efficient and sustainable system of ex situ conservation ...*". At the core of the Trust is the endowment fund, created to provide financial security to globally important collections of crop diversity in perpetuity.

27. While the value of crop diversity is undisputed, its conservation remains far from guaranteed as the funding for genebanks remains unstable and unpredictable, despite the fact that it is the reliability of funding that is probably the single largest risk to effective long-term conservation. The endowment fund of the Trust seeks to resolve this, offering precisely the annual guaranteed funding required to ensure that crop diversity is safe and available forever.

28. As the endowment fund grows, the income it generates is used to provide in-perpetuity funding for the operations of all the world's most important collections of crop diversity. Long-term financial support is provided to priority collections held and managed in accordance with international standards. All recipients must have undertaken to cooperate to promote the rational long-term conservation and sustainable utilization of the *ex situ* collections of germplasm and to manage them under the terms of the International Treaty.

29. To date, the Trust has approved long-term grants to ensure the conservation and availability of international collections of 15 major crops in 19 collections by eight CGIAR genebanks and one regional genebank (banana and plantain, barley, bean, cassava, edible aroids, faba bean, forages, grass pea, lentil, maize, pearl millet, rice, sorghum, wheat, yam). In addition, the Trust provides an ongoing grant for the operations of the Svalbard Global Seed Vault. The supported collections serve an exclusively international purpose as the backbone of the rational, efficient and effective global system. Collectively they provide more access to more plant breeders, researchers and farmers than any other institutions in the world.

30. In 2011, Trust long-term grants will total US\$2.34 million per year. Since 2006 US\$9.299 million has been provided through Trust long-term grants with this amount being leveraged in the Agreements by additional Centre contributions of US\$18.5 million.

31. Despite this substantial support underpinning the largest and most used collections in the world, significant additional resources will need to be placed in the Trust's endowment if the Trust is to meet its goal of providing stability, security and sustainability to these collections.

Regeneration of threatened, globally-important crop diversity

32. Three years ago, when the Trust initiated a large-scale project aimed at putting in place or strengthening key components of a Global System, a large amount of unique (non-duplicated) crop diversity was threatened. Many national genebanks reported that 50-100 percent of their collections were in urgent need of regeneration. Regeneration refers to the growing out and harvesting of seed samples before their viability declines and the seeds die. It is an essential, but often overlooked, part of conservation.

33. The first step in building a Global System therefore was to rescue this diversity before it was lost forever. Crop experts assisted in identifying priority collections where Trust assistance could help save unique accessions that could not, for instance, be restored by other genebanks.

34. With developing country partners, and in furtherance of the International Treaty (Articles 5.1(e)(f), 5.2, 7.2(a)(b)), the Trust embarked on funding the regeneration of threatened priority collections of 22 Annex I crops held in developing countries and countries with economies in transition. The initiative currently involves 86 institutes in 72 countries as well as crop and regional networks in regenerating approximately 90 000 accessions. The projects include the characterization and documentation of the regenerated accessions and their duplication at a genebank meeting international standards of management. Where necessary, equipment for regeneration and storage has also been provided.

35. The regeneration initiative included the development of multilingual guidelines (Arabic, English, French, Portuguese, Russian and Spanish) to assist participating institutes in following proper regeneration procedures for the target crops. Those guidelines can be found at: http://cropgenebank.sgrp.cgiar.org/index.php?option=com_content&view=article&id=48&Itemid=206.

36. Grant Agreements concluded for these activities are typically for a period of three years. One year remains for most of the projects. The Trust believes that most unique and threatened crop diversity of the 22 crops will have been rescued and secured at the conclusion of the project. Several relevant genebanks were unwilling to agree to the use of the Standard Material Transfer Agreement (SMTA) and to the standard requirement of safety duplication. The Trust was unable to conclude regeneration agreements with these facilities and their particular collections remain endangered. However, we are pleased to report that the overwhelming number of collection holders – 86 institutes – have partnered with the Trust in this historic endeavour, arguably the largest single effort ever to save and conserve crop diversity.

Safety duplication

37. The International Treaty cites the need “*to take appropriate steps to minimize or, if possible, eliminate threats to PGRFA*” (Article 5.2). Safety duplication of accessions stored in genebank collections is a recognized element of good management practices aimed at minimizing risk and threats to *ex situ* collections. Safety duplication of accessions at a separate location minimizes the risk of loss of important crop varieties, due to natural or human factors. The regeneration work funded by the Trust also produces enough seed for the creation of safety duplicates, which are sent to appropriate cooperating genebanks as well as (in the case of orthodox seeds) the Svalbard Global Seed Vault.

38. In addition to ensuring the safety duplication of unique diversity in managed genebanks, the Trust is also supporting the duplication under black-box conditions of unique accessions of the world’s most important crops at the Svalbard Global Seed Vault, in Norway, as an ultimate safety net.

39. The Seed Vault, welcomed unanimously by the 172 Members plus EU of the FAO Commission on Genetic Resources for Food and Agriculture, was officially launched in February 2008. It now provides virtually fail-safe security for over 600 000 duplicate samples of PGRFA. The Trust is contributing funding on an ongoing basis for the management and operation of the facility. The Executive Secretary of the Trust currently serves as the Chair of the Seed Vault’s International Advisory Council, whose membership also includes the Chair of the Governing Body of the International Treaty. Approximately 479 102 samples, representing 75 percent of the total housed in the Seed Vault have been shipped to Svalbard with funding from the Trust.

40. Currently, and in addition to a number of significant in-kind services, the Trust provides c.US\$130 000 annually in direct support for the operations of the Svalbard Global Seed Vault.

Collecting

41. With funds from a grower-supported organization in Australia, the Grains Research and Development Corporation (GRDC), the Trust has issued six grants for the collection of plant

genetic material from priority areas and populations likely to harbour traits of use in adapting crops to climate change. These projects target landraces and wild relatives of cowpea, pearl millet, finger millet, pigeon pea and sorghum in Ghana, Kenya, Malawi, Nigeria, Tanzania and Uganda. In all cases, collecting work is being undertaken with national partners. This has allowed the Trust to provide material support for Article 5.1b of the International Treaty that calls on Parties to “*promote the collection of plant genetic resources for food and agriculture and relevant information on those plant genetic resources that are under threat or are of potential use*”.

42. At the end of 2010, the Trust received a significant grant from the Government of Norway for a major climate change adaptation initiative. The project will work with the wild relatives of 26 Annex 1 crops of major importance to food security. It will: identify those crop wild relatives that are missing from existing collections, are most likely to contain diversity of value to adapting agriculture to climate change, and are most endangered; collect them from the wild; provide them to genebanks for conservation; prepare them (‘pre-breeding’) for use in breeding crops for new climates; evaluate them for useful traits; and make the resulting information widely available. The project will therefore introduce a range of new and exciting adaptive options for agriculture that might otherwise have been lost, whilst helping protect biodiversity from disappearing.

Evaluation of collections

43. The conservation of crop diversity makes sense only in the context of its availability and use. When little is known about the traits contained in genebank accessions, users are deterred and opportunities are lost. Recognizing that lack of knowledge about accessions constituted a severe impediment to the functioning of an effective and efficient Global System, the Trust embarked on an initiative to support evaluation of collections. Evaluation adds value to collections by identifying material with particular, important agronomic traits and adaptations.

44. The Trust has completed three calls under a competitive grants scheme for evaluation. The final call issued in 2009 brought the total of evaluation projects to 42. These projects cover 60 collections of 20 crops for 113 traits of significance to the poor in the context of climate change. They involve 57 different national/regional research institutes and eight CGIAR Centres, in 43 countries. Information will be placed in publicly accessible databases, and the genetic resources themselves made available under the terms of the International Treaty’s SMTA.

Information and information systems

45. Article 17.1 of the International Treaty requires that Contracting Parties “*cooperate to develop and strengthen a global information system to facilitate the exchange of information, based on existing information systems, on scientific, technical and environmental matters related to plant genetic resources for food and agriculture, with the expectation that such exchange of information will contribute to the sharing of benefits by making information on plant genetic resources for food and agriculture available to all Contracting Parties.*” Articles 13.2(a) and 12.3(c) address requirements to make information available.

46. To promote implementation of the International Treaty in this area, and to enable plant breeders and others to make greater use of genetic resources and thus contribute to generating and then sharing benefits as noted in Article 17.1, the Trust has embarked on a number of significant activities to enhance information about PGRFA and information systems:

- The Trust is working with the US Department of Agriculture (USDA) and Bioversity International to develop and deploy a state-of-the-art genebank management programme, GRIN-Global, which will be user-friendly, flexible and powerful, and useful for all sizes and types of genebanks anywhere in the world.
- The USDA GRIN-Global software system will be made freely available to genebanks in early 2011 to help improve the efficiency and effectiveness of their operations. Training-the-trainers sessions have been held, and technical assistance will be available to help genebanks adopt the system.

- The Trust has been collaborating with the Secretariat of the International Treaty and Bioversity International to develop a global on-line portal to accession-level germplasm information, Genesys. This builds on existing collaborative information systems such as SINGER and EURISCO. The system, which allows searching across multiple genebank databases, is currently undergoing testing, and will be further developed.

47. The Trust's goal in supporting the development of GRIN-Global and Genesys is to provide the information systems necessary for the professional management and curation of genebank collections, and to promote use by enabling effective searching for needed materials across genebanks. Without effective information systems, the vision of a rational and effective Global System enunciated by the International Treaty and the Global Plan of Action cannot possibly be realized. This explains the priority placed on these endeavours by the Trust and the Trust's continuing prioritization of this critical element.

Research to develop conservation protocols for vegetatively propagated crops

48. Under Article 5.1(e) Contracting Parties agree to "*Cooperate...to promote the development and transfer of appropriate technologies*" for the purpose of promoting the development of an "*efficient and sustainable system of ex situ conservation*". This is particularly critical in cases where crops are difficult or especially costly to conserve. Given the Trust's commitment to providing long-term financial support for the efficient and sustainable conservation of crop diversity, early improvements in conservation technologies promise to provide substantial cost savings over time, and are thus particularly attractive investments.

49. To promote the implementation of the International Treaty in this area, the Trust has embarked on a number of research activities. These include making improvements to existing embryo culture protocols in partnership with the coconut network (COGENT), and developing cryopreservation methodologies for cassava, sweet potato, taro and yam. The research is aimed at providing more robust and cost-effective methods to conserve and make available germplasm of these crops.

50. The Trust is supporting the application of cryopreservation to the international banana collection managed by Bioversity International, to help secure its long-term conservation. Work to cryopreserve 250 accessions is well under way.

Public awareness

51. The Trust is very active in public awareness activities. Drawing attention to the links between climate change and agriculture is central to the Trust's public awareness efforts. This connection is highlighted in virtually every issue of *Crop Diversity Topics*, the organization's analytical newsletter: <http://www.croptrust.org/main/topics.php>.

52. In preparation for the UNFCCC meeting in Copenhagen in 2009, the Trust drafted a statement on agriculture, climate change and crop diversity signed by more than 60 of the world's leading figures in agriculture. Executive Secretary Cary Fowler attended the climate change negotiations promoting crop diversity as an essential component of any effective strategy to mitigate and adapt to climate change. The statement can be found at: <http://www.croptrust.org/main/climatestatemen.php>.

53. In 2010, the Trust worked to publicize the threat posed to the Pavlovsk Experimental Station in St. Petersburg, Russia, by takeover for a housing development. This collection of 5 500 fruit and berry varieties – 90 percent estimated to be unique – is the largest field collection in Europe. More than 50 000 people signed Trust-initiated petitions. The case has received extensive media coverage. The collection remains threatened.

54. The Trust, typically in cooperation with national partners, issues several press releases each year. The press releases can be downloaded from <http://www.croptrust.org/main/press.php>.

55. The Svalbard Global Seed Vault continues to attract media attention from around the world three years after its opening. The Trust has issued several press releases in connection with anniversaries and shipments to the Seed Vault, aiming to underscore the importance of crop diversity to global agriculture and food security.

Table 1. Summary of Trust funding over all programmatic activities

Activity	2009 grants (US\$)	2010 grants (US\$)	2011 grants (US\$)
A. Long-term conservation and availability of crop diversity	1 863 100	2 052 912	2 343 970
B. Regeneration of threatened, globally important crop diversity	1 498 657	1 106 515	220 000
C. Safety duplication (shipment of accessions to international centres and Svalbard)	74 106	60 492	400 000
D. Collecting	0	178 992	0
E. Evaluation of collections	430 663	503 832	167 844
F. Information and information systems	1 130 312	1 178 440	354 000
G. Research to develop conservation protocols	595 663	717 497	167 439
TOTAL	5 592 501	5 798 680	3 653 253

56. On a daily basis, the Trust raises awareness of plant genetic resources and their importance through its website and newsletter, and through social media outlets such as Facebook and Twitter.

57. More information about the Trust's strategy, programmes and finances can be found at: www.croptrust.org.

IV. OTHER AREAS OF COOPERATION

58. The Trust and the International Treaty Secretariat have begun to undertake joint fundraising activities and presentations on the importance of PGRFA and the International Treaty and also the Trust and the Benefit Sharing Fund as components of the Funding Strategy.

59. Regular meetings, formal meetings and informal interactions with staff of the Secretariats of the International Treaty and the Commission are important means that the Trust uses to strengthen cooperation and joint planning in other areas. The Secretary of the Governing Body attends the Trust's Executive Board meetings with observer status.

60. In addition to the significant cooperation with FAO and CGIAR Centres with regard to the implementation of its programme (refer to Section III), cooperation between the Trust and these organizations has included a number of other activities. For example:

- Review of the Genebank Standards. Trust staff have participated in technical consultations and review of draft revised standards.
- Preparation of FAO's SoWPGRFA-2. Trust staff participated in some regional meetings and contributed to the review of draft chapters.

- Updating the Global Plan of Action. Trust staff have participated in the expert group and some regional consultative meetings, and contributed to review of drafts.
- CGIAR Genebank Costing Study. The Trust entered into a Memorandum of Understanding with the CGIAR Consortium to undertake a study into “*The Cost to the CGIAR Centres of Maintaining and Distributing Germplasm*” and Trust staff provided administrative and technical support to the consultants undertaking this study.
- CGIAR System Wide Genetic Resources Programme (SGRP). Trust staff took on Activity Coordinator roles and participated in many activity components of the Global Public Goods 2 Project.

V. CONCLUSION

61. The Trust spearheads international efforts to endow the world’s most important collections of crop diversity. The Trust, as an essential element of the International Treaty’s Funding Strategy, specifically supports the *ex situ* conservation of crop genetic diversity. The Trust, the International Treaty and the Commission contribute in different but mutually supportive ways to ensure the conservation and sustainable use of plant genetic resources.

62. The Trust is a direct and unique response to the chronic underfunding of *ex situ* collections – the genebanks that store the genetic diversity of every crop of importance to humanity. The continued availability of the vast diversity of crop varieties is the only way to guarantee that farmers and plant breeders have the raw materials needed to improve and adapt their crops to ensure continued and improved agricultural productivity.

63. In order to ensure this vital step in future-proofing agriculture, the Trust appeals to countries and donor agencies to summon the necessary political will to invest in the Trust’s endowment fund to secure crop diversity, forever.

64. In closing, the Trust would like to use this occasion to reaffirm its commitment to pursuing its objectives through the framework of the International Treaty, and to continue fulfilling its role as an essential element of the International Treaty’s Funding Strategy. The Trust looks forward to continuing and strengthening the constructive and cooperative relationship that already exists between the Trust and the Commission.