



## Contents

|   |           |
|---|-----------|
| <b>LIST OF ABBREVIATIONS</b> .....  | <b>2</b>  |
| <b>REPORT HIGHLIGHTS</b> .....  | <b>3</b>  |
| <b>1.0 MANAGEMENT AND ADMINISTRATION</b> .....                              | <b>4</b>  |
| 1.1 The 25 <sup>th</sup> Ordinary Board Meeting held in Lusaka, Zambia..... | 4         |
| 1.2 Workshops and Meetings.....   | 5         |
| 1.3 Visitors.....   | 7         |
| <b>2. PERSONNEL, EQUIPMENT AND SUPPLIES</b> .....                           | <b>7</b>  |
| 2.1 SPGRC Personnel.....  | 7         |
| 2.2 Staffing in NPGRCs.....   | 8         |
| 2.3 Equipment and Supplies.....   | 9         |
| <b>3. TRAINING AND EDUCATION</b> .....                                      | <b>10</b> |
| 3.1 Training for SPGRC Network Staff .....                                  | 10        |
| 3.2 Important Meetings Attended by SPGRC Staff.....                         | 12        |
| <b>4. TECHNICAL ACTIVITIES</b> .....  | <b>14</b> |
| 4.1 Germplasm Collection and In-Situ Conservation.....                      | 14        |
| 4.2 <i>Ex-Situ</i> Conservation.....  | 17        |
| 4.3 Documentation and Information.....                                      | 21        |
| <b>5. OTHER NEWS</b> .....  | <b>24</b> |
| 5.1 Potential Regional Projects: Citrullus/Cucurbit Network .....           | 24        |
| 5.2 SANBio Regional Project Proposal .....                                  | 24        |
| 5.3 GPA Project Developments: Angola, Malawi and Zambia.....                | 25        |
| 5.4 Construction of Biotechnology Laboratory.....                           | 26        |
| 5.5 Farm.....   | 26        |
| <b>6. SYNOPSIS FROM ANNUAL PLANNING MEETING</b> .....                       | <b>26</b> |
| 6.1 Community Seedbanks.....  | 26        |
| 6.2 Types of pollination bags.....  | 26        |
| 6.3 Field genebanks.....  | 27        |
| 6.4 Development companies' influence on PGRs damage.....                    | 27        |
| <b>7. OBITUARY</b> .....  | <b>27</b> |
| <b>8. FINANCIAL REPORT 2007/2008</b> .....                                  | <b>29</b> |
| <b>9. APPENDICES</b> .....  | <b>32</b> |
| Appendix I: Members of the Board of SPGRC.....                              | 32        |
| Appendix II: SPGRC Staff Members.....                                       | 33        |
| Appendix III: List of Some Prominent Visitors to SPGRC (2008/2009).....     | 34        |
| Appendix IV: SPGRC Publications in 2008/2009.....                           | 35        |

**List of Abbreviations**

|            |  |
|------------|--|
| ARC        | Agricultural Research Council ( South Africa)                            |
| Bioversity | Bioversity International   |
| CBN        | Community Biodiversity Network (Zambia)                                  |
| CGIAR      | Consultative Group on International Agricultural Research                |
| EAPGREN    | Eastern African Plant Genetic Resources Network                          |
| GCDT       | Global Crop Diversity Trust  |
| GEF        | Global Environment Facility  |
| GPA        | Global Plan of Action  |
| ICM        | Integrated Committee of Ministers  |
| ICRISAT    | International Crops Research Institute for the Semi-Arid Tropics         |
| IK         | Indigenous Knowledge   |
| ITPGRFA    | International Treaty on Plant Genetic Resources for Food and Agriculture |
| IUCN       | World Conservation Union   |
| MSBP       | Millenium Seed Bank Project  |
| NEPAD      | New Economic Partnership for Africa's Development                        |
| NFP        | National Focal Point   |
| NGO        | Non-Governmental Organisation  |
| NISM       | National Information Sharing Mechanism                                   |
| NordGen    | Nordic Gene Bank   |
| NPGRC      | National Plant Genetic Resources Centre                                  |
| RCWG       | Regional Crop Working Group  |
| RISDP      | Regional Indicative Strategic Development Plan (SADC)                    |
| SADC       | Southern African Development Community                                   |
| SANBio     | Southern Africa Network for Biosciences                                  |
| SDIS       | SPGRC Documentation and Information System                               |
| SEK        | Swedish Kronor (currency)  |
| SEPASAL    | Survey of Economic Plants for Arid and Semi-Arid Lands                   |
| Sida       | Swedish International Development Co-operation Agency                    |
| SPGRC      | SADC Plant Genetic Resources Centre                                      |
| SSSN       | SADC Seed Security Network   |
| UNDP       | United Nations Development Programme                                     |



### Report Highlights

- Retirement of Veteran Board Members
- New Head at SPGRC
- Board of Directors' Ordinary Meeting Held in Lusaka, Zambia
- SPGRC Regional Sensitisation Seminar on ITPGRFA
- Technical Review and Planning meeting in Lusaka, Zambia
- Mr Ofentse will be missed

## 1.0 MANAGEMENT AND ADMINISTRATION

### 1.1 The 25<sup>th</sup> Ordinary Board Meeting, Lusaka, Zambia

The 25<sup>th</sup> SPGRC Ordinary Board meeting was held in Lusaka, Zambia between 19<sup>th</sup> and 20<sup>th</sup> September 2008. The Board meeting was preceded by a one-day sensitisation seminar on implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) that was attended back-to-back by the participants of the Annual Technical Review and Planning meeting and the Bioversity International as well as the Treaty Secretariat personnel, the latter two providing resource persons.

The Board has four new members. These include the Board Member for Angola, Dr Antonio Alcochete, the Board Member for Botswana, Ms Mary Molefe, Dr. S. Kunene from Swaziland, and Mrs D. Hikwa, a new Board Member for Zimbabwe, who unfortunately could not attend the meeting. The meeting was also attended by the representatives of the SADC Secretariat, NGB, Sida, Bioversity International and the hosts, SPGRC.

The Board welcomed the new Head of SPGRC, Dr Paul Munyenembe who joined the Centre and the network in July 2008.

Dr G L Maggs-Kölling and Dr J Jaftha from Namibia and South Africa respectively were elected Chairperson and Vice Chairperson, replacing the outgoing office bearers whose term had ended.

#### 1.1.1 Retirement of Two Board Members

Two long-serving members of the SPGRC Board, namely Mr Peter Herthelius and Ms Elizabeth Matos have retired.

Mr Peter Herthelius who represented Sida on the Board for almost 20 years retired in December 2008 as a Senior Agricultural Advisor at Sida and therefore ceases to represent Sida on the Board. Dr Torsson Anderson of Sida takes over in handling the SPGRC Project from Nairobi, Kenya, though he will be based in Stockholm, Sweden.



*Ms Liz Matos*



*Mr Peter Herthelius*

Ms Liz Matos, retired from representing Angola in the Board and will be replaced by Dr Antonio Alcochete.



The Board registered its appreciation for the contributions made by the two retirees who tirelessly advised, supported and led the SPGRC Network in a positive direction. While wishing them peaceful retirements, the Board also promised to give support to the incoming replacements.

## **1.2 Workshops and Meetings**

### **1.2.1 Annual Technical Review and Planning Meeting**

The annual SPGRC/NPGRCs technical review and planning meeting was held in Lusaka, Zambia between 15<sup>th</sup> and 18<sup>th</sup> September 2008 with the objective of: reviewing implementation of the technical activities for 2007/2008 cropping season and evaluating technical plans for the 2008/2009 cropping season. It also facilitated information sharing on technical and networking issues. It was attended by 35 participants from NPGRCs, SPGRC, Sida, NGB, Bioversity International, FAO Sub-Regional Office (Zimbabwe), and the Global Crop Diversity Trust.

The meeting's last day was dedicated to interaction between the network scientists and the SPGRC Board members at the ITPGRFA sensitization seminar held at the same venue.



*Participants' group photo at the Annual Planning meeting, Lusaka*

With regard to the SPGRC Long-Term Sustainability Strategy, the meeting was informed that following the strategy's alignment to Regional Indicative Strategic Development Plan (RISDP) and provision of other funding options as directed by the ICM, the strategy that had initially been approved by the Board in February 2007, was now approved by the SADC Council in August 2007. Following the end of the project in 2009, SPGRC will be required to raise at least 10% of the total budget through projects and donor support, rising up to 30% by third year. To implement the Council's decision, SPGRC will commission a study to provide details on how it can become sustainable after the 3-year transitional period. This will also include development of a strategic plan beyond 2012.

### 1.2.2 Regional Crop Working Groups

There were no RCWGs meetings held during the reporting period. The outputs from previous meetings were used to compile strategies for collection and conservation of plant genetic resources of various species groups.

Following a recommendation at the planning meeting, a special task force was formed to formulate strategies and later, regional proposal for on-farm/*in-situ* activities. A meeting was held in Lusaka, Zambia on 9<sup>th</sup> - 10<sup>th</sup> June 2008 and strategies proposal was developed, and has been shared with other stakeholders to have inputs for its completion.

### 1.2.3 SPGRC Regional ITPGRFA Sensitisation Workshop

The workshop, hosted by SPGRC, was held on 18<sup>th</sup> September 2008 in Lusaka, Zambia and was attended by SPGRC network scientists and SPGRC Board members.

A short overview of the main components of the Treaty and the state of Treaty implementation globally was presented. It was noted that one of the key components of the Treaty which required immediate implementation was the Treaty's Multilateral System of Access and Benefit-sharing.

It was highlighted that some of the obligations that Contracting Parties have undertaken under the Treaty in regard to the Multilateral System, including taking appropriate measures to encourage natural and legal persons within their jurisdiction who hold *Annex 1* material to include such plant genetic resources for food and agriculture (PGRFA) in the Multilateral System. The need for Contracting Parties to inform the Secretariat of PGRFA that are in the Multilateral System within their respective jurisdictions, as well as those included by natural and legal persons within their jurisdiction, using the sample letter approved by the Bureau was emphasized.

A presentation was made on regional cooperation in the implementation of the Treaty, describing the way in which regional cooperation was being developed in four different regions of the world: Western Asia and Northern Africa; the European Region; West and Central Africa; and the Pacific Region. It concluded that regional networks were seeking better mechanisms for regional collaboration in *ex-situ* conservation, which included the sharing of responsibilities, and mechanisms to ensure the availability of material in the region and outside, covering PGRFA of Annex 1 crops, with a tendency to extend into non-Annex 1 crops.

Later on, at the workshop, each country in the region submitted its own report on progress in the implementation of the Treaty. Out of the country reports, it was unveiled that:

- Eleven of the 15 countries had ratified the Treaty;
- Challenges include developing an appropriate legal framework for Access and Benefit-sharing and farmers' rights;
- There is a need to harmonize policies and legislation at the regional level;
- There is a need for national workshops;
- There is a need for capacity building and appropriate funding of activities;
- There is a need to demonstrate benefits of Treaty to help countries.



A presentation by the SPGRC Head pointed out a series of actions to be taken at the national level, including:

- Accession to the Treaty for those countries that have not signed, ratified or acceded;
- Organization of national Treaty workshops to raise awareness about the Treaty and review status of Treaty implementation;
- Domestication of the Treaty; and
- Development of national strategies and action plans for Treaty implementation.

In terms of lessons learnt from the workshop, the following three elements emerged.

- In the perception of workshop participants, the Multilateral System is a practical instrument but too much focussed on access. Within the framework of the Treaty funding strategy, concrete measures to mobilize resources for benefit-sharing should be conceived and executed;
- Several capacity building needs were highlighted during the group discussions. The Treaty Secretariat will consider those capacity building needs and channel them to the capacity building coordination mechanisms; and
- The SPGRC network may be willing to strengthen its role within the Global Information System of PGRFAs (article 17 of the ITPGRFA) in reporting on the implementation of the Multilateral System.

### 1.3 Visitors

SPGRC received a number of visitors during the reporting period ranging from primary school pupils, university students, policy makers, farmers to prominent individuals. They are listed in Appendix III.

## 2. PERSONNEL, EQUIPMENT AND SUPPLIES

### 2.1 SPGRC Personnel

The position of the Head of SPGRC has been filled in by Dr Paul M. Munyenembe who started work on 18<sup>th</sup> July 2008. He took over from the Acting Director Ms Thandie Lupupa who acted in the position since September 2006.

Dr Munyenembe brings a wealth of experience in conservation, having previously taught botany and conservation biology at universities in Tanzania and Malawi. Apart from conducting research in PGR conservation, he has also worked for IUCN -The World Conservation Union's Regional Office for Southern Africa (ROSA) as a Technical Advisor to the GEF/UNDP-funded Southern Africa Biodiversity Support Programme, and the Lake Chilwa Wetland and Catchment Management Project (an integrated conservation and development project ICDP) supported by Danida.



The SPGRC's last substantive Director, Dr Godwin Mkamanga finished his contract in October 2002 after serving for more than 12 years (from August 1990). Mr Charles Nkhoma was appointed to act as Director from November 2002 until June 2006 when his contract ended. Dr Bonga Nkosi briefly held the position of the Director between June and July 2006 before resigning on medical grounds. Ms Thandie Lupupa acted in the position from September 2006 until the coming of Dr Munyenembe.

The network welcomes Dr Munyenembe and wishes him well in performing his duties at SPGRC.

Mr Olipen Phiri was recruited to the position of a General Worker from 5<sup>th</sup> January 2009.

After completion of his secondary education in Chassa in 1992, Mr Phiri joined Polycor (Z) Ltd. in 1994 to work as a Machine Operator till 1996 when he moved on to join Vacuum Forming Industries and again as a Machine Operator.

In 1998, he joined Zamcargo (Z) Ltd. as a General Worker until 2001 before joining Mutupo & Associates on the same capacity.

He therefore brings a rich experience gained while serving the previous organisations and companies.



He fills in the gap left behind by the late Mr Backwell Ngoma who passed away on 25<sup>th</sup> December 2007.

The SPGRC Network welcomes Mr Phiri and wishes him the best in executing his duties at SPGRC.

## 2.2 Staffing in NPGRCs

Two NPGRCs had changes in Curators. Specifically, the Curator for Botswana, the late Mr T. Ofentse passed away on 6<sup>th</sup> April 2008 and was replaced by Ms Mary Molefe as the new Curator. The Curator for South African NPGRC, Mr Andre Lezar left the NPGRC to join another South African Agricultural Research Council (ARC) programme and has since been replaced by the Acting Curator, Mr T. Mukoma. Mr John Kanthungo of the Malawian NPGRC who served as Collections Officer left NPGRC for a local NGO in Lilongwe, Malawi.

Conservation officers who went for MSc training from NPGRCs of Lesotho and Namibia reported back and continue to work; whereas, staff who continue pursuing their PhD studies in Sweden



went back to their respective countries to do research and resumed studies in September 2008 and are expected to complete their studies by mid-2009.

Otherwise, the staffing in other NPGRCs has remained rather stable but Swaziland NPGRC is facing acute staff shortage. A new recruitment for a technician was done in Namibia.

### **2.3 Equipment and Supplies**

The fleet of vehicles at SPGRC is in reasonably good condition though most of them are constantly taken for repairs. While the Land Rover – Discovery has been put up for sale, insurance money for the accident-damaged off-written Toyota single-cab van has been paid to SPGRC. SPGRC is in the process to replace the ageing utility Toyota Hilux double-cab van.

Six (6) deep freezers were bought locally as a measure to gradually replace old freezers that frequently broke down and are becoming costly to maintain. Some more freezers will be procured by the end of the financial year. Four (4) desktop and three (3) laptop computers were procured for SPGRC to replace old ones.

With the exception of DRC and Madagascar, the SPGRC project has provided and continued to maintain functioning of equipment and facilities in the network, as well as ensuring that supplies of consumables were continuously, and when needed, availed.

During the year, the project supplied stand-by electric generators for Malawi, Mauritius, and Swaziland. The project also helped in the installation of the Tanzanian walk-in drier secured through the Trust funding.

Two desktop computers, one UPS and two printers were sourced for Mozambique. Malawi received one desktop computer, one printer and two UPSs. Swaziland received four new freezers, one desktop computer, two printers and two UPS. Four freezers, one desktop, a printer and two UPSs were procured through the project for Zambia.

Renovation of the Malawian NPGRC building was completed, while some money was allocated for extension of the Lesotho NPGRC building. The latter also received a drying cabinet.

In order to cover up an urgent need for freezers, NPGRC Mauritius bought three freezers using its own (government budget) funds. On the same lines, Namibia acquired a new desktop computer and a printer using government budget money.

The Tanzanian NPGRC received a total of 64 pieces of laboratory equipment for use in the Biosafety project, coordinated by one staff member of NPGRC. It also received one desk top computer and its accessories.

### 3. TRAINING AND EDUCATION

As part of the capacity building for drying facilities in the region, with funding from the Trust, SPGRC hired a consultant to assess and take stock of the status of the drying facilities in all countries of SADC. At the same time, training on basic servicing and maintenance of driers was offered to NPGRC staff visited. As a result of this consultancy, maintenance and servicing manual for driers is under preparation and will be published and distributed for use by NPGRCs.

Several network staff attended various short training courses in different areas including biosafety, molecular techniques, geo-informatics, and other areas of PGR management.

There are currently three network staff pursuing PhD studies from Angola, Zambia and Zimbabwe with the later two being sponsored by the SPGRC network. The Angolan candidate is studying in Brazil and the Zambian and Zimbabwean candidates are studying in Sweden, the latter two under project sponsorship.

There are also 3 MSc candidates from Mauritius, Tanzania and Zimbabwe pursuing their studies in PGR management and related fields. While the Mauritius and Zimbabwean candidates are paid for by the project and undertaking their studies in Sweden, the Tanzanian candidate is not sponsored by the project and is studying in New Zealand.

#### 3.1 Training for SPGRC Network Staff

##### 3.1.1 Performance Management System

SPGRC planning workshop for Result-Based Planning as a tool for effective management was conducted for SPGRC staff in Lusaka. The training was conducted by the SADC Secretariat Planning and Monitoring Consultants. The training focused on Personnel Management System (PMS) through which participants developed own annual workplans based on their job descriptions. These would be approved by Head – SPGRC, and also by SADC Secretariat at the Policy and Strategic Planning Unit for implementation in the next financial year 2009/10.

##### 3.1.2 Training and Education for NPGRC Staff

Thirteen (13) SADC nationals attended the annual short course that was held at NGB in Sweden from 22<sup>nd</sup> June to 8<sup>th</sup> August 2008 (Table 1). Other courses attended outside the network are reported separately, under respective technical activities.



**Table 1: Participants for short course on PGR Management at NGB**

| Name of Candidate          | Country      |
|----------------------------|--------------|
| 1. Mr Jose Pedro           | Angola       |
| 2. Mr Chiyapo Gwafila      | Botswana     |
| 3. Ms Tiny Mstlhaodi       | Botswana     |
| 4. Mr Lodi Lama Jean_Paul  | DRC          |
| 5. Mr Bokang Ntloko        | Lesotho      |
| 6. Mr Madalitso Kadaola    | Malawi       |
| 7. Ms Elsa Timana          | Mozambique   |
| 8. Ms Aino Mbereme-Mtuleni | Namibia      |
| 9. Mr Isaac Kgonothi       | South Africa |
| 10. Mr Victor B Simelane   | Swaziland    |
| 11. Ms Delphina Mamiro     | Tanzania     |
| 12. Mr Allan M. Chitumbo   | Zambia       |
| 13. Mr Lloyd Mutimbanyoka  | Zimbabwe     |

With the above participants, the total number of trained SADC scientists/personnel between 1990 and 2008 is given in Table 2.

**Table 2: Trained Personnel under SPGRC in PGR (1990 to 2008)**

| Country      | Certificate*<br>+NGB | MSc.      | PhD        | Total      |
|--------------|----------------------|-----------|------------|------------|
| Angola       | 15                   | 3         | -          | 17         |
| Botswana     | 16                   | 5         | -          | 19         |
| DRC          | 2                    | -         | -          | 1          |
| Lesotho      | 15                   | 5         | -          | 19         |
| Malawi       | 27                   | 7         | -          | 33         |
| Mauritius    | 11                   | 4         | -          | 15         |
| Mozambique   | 20                   | 3         | -          | 22         |
| Namibia      | 14                   | 3         | -          | 16         |
| Seychelles   | 2                    | 1         | -          | 3          |
| South Africa | 13                   | 3         | -          | 15         |
| Swaziland    | 22                   | 4         | -          | 25         |
| Tanzania     | 26                   | 5         | -          | 30         |
| Zambia       | 24                   | 5         | 1**        | 28         |
| Zimbabwe     | 25                   | 5         | 1**        | 29         |
| <b>Total</b> | <b>229</b>           | <b>53</b> | <b>2**</b> | <b>285</b> |

\* Short course at NGB or short course at the University of Birmingham in U.K., or short course in Plant Taxonomy in Sweden or SPGRC short course in Zimbabwe, or SPGRC Documentation Workshop in Zambia.

\*\* Started in Winter 2007, expected to last 4 years, until 2011

## 1.2 Some Important Meetings Attended by SPGRC Staff

- The Senior Programme Manager–Documentation and Information attended the SADC/Sweden Cooperation Annual Consultations that was held in Gaborone, Botswana on 16<sup>th</sup> May 2008. He presented progress made during the Fourth phase and expected outputs for the Fifth phase.
- SPM – Documentation & Information and SPM – *In-situ* Conservation as members of the SANBio Task Force attended the first Task Force meeting held in Durban, South Africa between 2<sup>nd</sup> and 3<sup>rd</sup> June 2008 to prepare a regional proposal for enhancement of capabilities of conservation and utilisation of PGR.
- SPM – *In-situ* participated in Crop Diversity Seed Fairs (July 2008) in Malawi where the NPGRC distributed 6 local varieties of finger millet for on-farm conservation purposes.
- The SPM - *Ex-situ* Conservation, accompanied by a consultant on drying facilities visited Botswana, Lesotho, Mozambique, Tanzania, Zambia and Zimbabwe between 20<sup>th</sup> July and 2<sup>nd</sup> August 2008 to assess requirements and repair driers as well as training NPGRC staff on basic operation and maintenance of driers.
- The Head attended SADC Council of Ministers Meeting in Sandton South Africa on 14<sup>th</sup> and 15<sup>th</sup> August 2008.
- The Head and all SPMs attended the SANBio meeting on 19<sup>th</sup> August 2008 held at SPGRC in Lusaka to finalize the SANBio regional proposal for enhancing capabilities in conservation and utilisation of PGRs.
- The SPM – *In-Situ* Conservation attended ABS workshops in Namibia in September 2008 and Madagascar 23<sup>rd</sup>-28<sup>th</sup> November 2008. During the trip in Madagascar, she consulted with authorities to establish possibility and mechanisms for Madagascar participation in SPGRC network activities.
- The Head visited SADC Secretariat, in particular, the FANR between 1<sup>st</sup> and 3<sup>rd</sup> September 2008 to familiarise himself with SADC structures and operations.
- SPM – *In-situ* conservation visited to Tanzania in November 2008 to provide technical backstopping in the establishment of in-situ/on-farm conservation logistics in the country.
- The SPM – Documentation & Information attended Regional (SADC) Directors of Agricultural Research and Extension meeting held in Morogoro, Tanzania between 17<sup>th</sup> and 19<sup>th</sup> November 2008.



- The SPM – Documentation & Information accompanied by Technical Officer – Documentation & Information visited Botswana and South African NPGRC between 23<sup>rd</sup> November and 5<sup>th</sup> December 2008 to resolve some of the long-term pending issues on documentation and database management. They also trained staff in the two NPGRCs on how to update, maintain and query the database.
- The Head attended the Eastern African Plant Genetic Resources Network (EAPGREN) Steering Committee Meeting held in Addis Ababa, Ethiopia from 2<sup>nd</sup> to 5<sup>th</sup> December 2008.
- The Head visited the SADC Secretariat between 22<sup>nd</sup> and 23<sup>rd</sup> January 2009 for consultations on the long-term sustainability of SPGRC. He also visited the Botswana NPGRC in Gaborone during the same time.
- SPM – *In-situ* Conservation visited Zimbabwe between 8<sup>th</sup> and 15<sup>th</sup> February 2009 to assess the relevance of Community Seed Banks to on-farm conservation emanating from a resolution made from the 2008 planning meeting.
- The Head, accompanied by Assistant Finance Officer attended the SADC Finance Sub-Committee and Council of Ministers' meetings in Cape Town, South Africa between 20<sup>th</sup> and 27<sup>th</sup> February 2009.
- SPM – *Ex-situ* Conservation visited Swaziland (22<sup>nd</sup> – 28<sup>th</sup> February 2009) and Zimbabwe (28<sup>th</sup> February - 14<sup>th</sup> March 2009), providing technical backstopping and also working on the Trust-funded regeneration project due to start in FY 2009/10.
- The Head and Assistant Finance Officer attended the SADC Finance Sub-Committee meeting on 8<sup>th</sup> – 11<sup>th</sup> December 2008 held in Gaborone, Botswana.
- The Head attended a FANR Retreat meeting on Monitoring and Evaluation between 4<sup>th</sup> and 6<sup>th</sup> March 2009 in Rustenburg, South Africa.
- SPM – Documentation & Information accompanied by the section Technical Officer visited Zimbabwean NPGRC between 8<sup>th</sup> and 14<sup>th</sup> March 2009 to provide technical backstopping, particularly on the re-arrangement of germplasm material in the genebank and sorting out materials with wrongly assigned accession numbers.
- SPM – *In-situ* and SPM – Documentation & Information respectively attended farmers' field day at Golden Valley Agriculture Research Trust (GART) and Chikankata Farming Community on 19<sup>th</sup> March 2009.

## 4. TECHNICAL ACTIVITIES

### 4.1 Germplasm Collection and *In-Situ* Conservation

#### 4.1.1 Germplasm Collection

During the year, the Senior Programme Manager - *In-situ* through the Technical Officer, participated in germplasm collection expeditions in Serenje, Zambia. Also, staff from SPGRC, in particular, SPM – *Ex-situ* Conservation and SPM – Documentation & Information joined the Zambian NPGRC staff on short targeted collection missions within Zambia.

#### 4.1.2 On-farm Conservation

Technical assistance on various issues was provided to countries including Malawi, Namibia, Tanzania and Zambia. Field days were attended in Zambia where farmer groups are engaged in the multiplication and restoration of groundnuts, beans, sorghum and maize.

The assessment of the relevance of community seedbanks to on-farm conservation has highly been done in Zimbabwe where farmers value their own facility which enhances the maintenance of crop diversity at community level, enables farmers to plant in time and the food base is broadened due to the crop diversification.

The Senior Programme Manager – *In-situ* visited Tanzania to assist in establishing and kick-starting on-farm activities by NPGRC. The SPM – *In-situ* Conservation also accompanied the Zambian NGO - CBN staff to visit and study areas around Lusaka where farmers are engaged in conservation, particularly, African leafy vegetables.

In terms of *in-situ* conservation and under-utilized species, the network has noted a need for a strong linkage between NPGRCs and the extension services, private sector and NGOs. In that tone, Lesotho, for example, is collaborating with the World Vision International to carry out on-farm conservation in different areas.

The Malawian NPGRC is promoting finger millet conservation on-farm and Tanzania has proposed for a 4-year project to strengthen on-farm conservation targeting such crops as sorghum, finger millet, lablab beans, and cowpeas in order to avert their genetic loss.

#### 4.1.3 *In-Situ/On-Farm* Draft Project

As mandated by the 2007 Review and Planning meeting, a Task Team was put in place to develop a regional project proposal for resource mobilisation, and to identify potential donors for funding projects in order to implement the *in-situ/on-farm* strategies. The Team met on 8<sup>th</sup> – 10<sup>th</sup> June 2008 in Lusaka, Zambia.



The Task Team comprised of NPGRCs *in-situ* conservation officers, co-opted SADC national experts, officers from key collaborating institutions and SPGRC Senior Programme Manager responsible for *in-situ* conservation. The Head of SPGRC and SPGRC Technical Advisor were accorded the *ex-officio* status in the Team.

Given their Terms of Reference, the Team proposed to mainly focus on two major strategies: on-farm conservation of crop diversity, and under-utilised plants.

As a way forward, a logical framework was developed by the team and presented to the planning meeting in September 2008 and the Senior Programme Manager *in-situ* was tasked to develop the proposal, circulate it to the Task Team before sending it to NPGRCs for comments. This was done in March 2009. The first draft will be presented to the meeting of the Task Team which is to be convened and funded by SPGRC. The draft will then be circulated again to national centres for final comments.

Generally, there is a regional feeling that seed fair promotion of traditional varieties needs to be intensified as well as building strong farmer capacities on issues of farmers' rights so as to create demand whereby seed fairs can enhance creation of such fora.

#### **4.1.4 In Situ Conservation and Under-utilized Plants**

The Zambian NPGRC is replacing cassava and sweet potato crop in the field genebank because it is old and there has been a noted build-up of pests and diseases.

Some work has been done on marama bean (*Tylosema esculentum*), including a mini-reconnaissance survey carried out in Namibia to determine distribution pattern of and research work done on the plant. Herbarium specimens were used to get the sites where *Tylosema* spp. is occurring and literature search was also done at the Library of the National Botanical Institute and additional information was gathered from the SEPASAL office located in the same institution. The University of Namibia was visited where lecturers conducting research on the plant were met.

The research work is more on value addition, processing and marketing of the bean and from this work, it was realized that the increase on harvesting of the marama bean could threaten the plant since it is occurring in the wild. It was reported that some preliminary work was previously done on the domestication of Marama and there were no tangible results realized. SPGRC, in collaboration with NPGRCs where *Tylosema* sp. is occurring is working to jointly develop a project proposal and sell it out for funding.

#### **4.1.5 SPGRC Seed Fair**

The Seed Fair was held on 14<sup>th</sup> August 2008 at SPGRC and was attended by designated and invited guests from the embassies, government, NGOs and from the farming communities.

The Fair was officiated by the Zambian Minister of Agriculture and Cooperatives, Hon Sarah Sayifwanda who commented on the tireless efforts being made by SPGRC to coordinate collection, conservation, documentation and utilization of plant genetic materials in order to avert food insecurity and poverty in the region. She strongly affirmed Zambia's support for the Centre and promised to be its good Ambassador for advocating for its importance to the region and thus support for sustainability from the SADC Member States.

The theme was "Conservation of local crops through diversity," meant to encourage farmers not to narrow down the food base so as to fight the current challenges of climate change and to increase access to food.



*The Guest of Honour, Hon. Sarah Sayifwanda, accompanied by other guests had an opportunity to visit SPGRC facilities*

The Fair was attended by the Zambian SPGRC Board Member, Dr S. Muliokela, Zambian Agricultural Research Institute Director, Dr S. Mwale, The Finnish Ambassador to Zambia, H. M. Ms Sinikka Antila, Finnish Embassy Counsellor Ms Wilma Viljanmoa, Representative of the Tanzanian High Commission to Zambia, Mr Jeswald Majuva, the Representative of the Lusaka Province Chieftainess, and several invited guests.

The Minister with other delegates had an opportunity to visit the laboratories, genebank and the fields to see SPGRC activities on the ground.



## 4.2 *Ex-Situ* Conservation

Though the size of *ex-situ* collections has expanded substantially over the last two decades of the existence of the network, fundamental phenotypic information gathering through characterisation was carried out by the region as shown in the table below

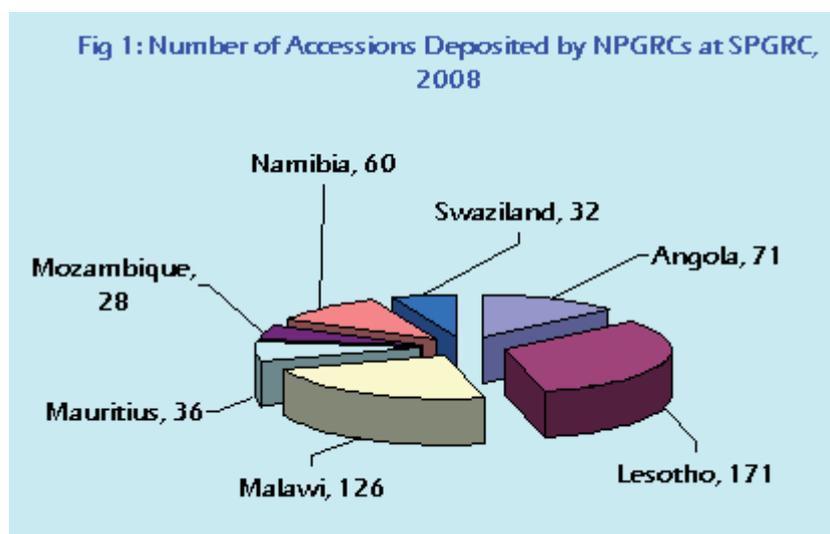
Table 4: Summary of Actual and Proposed Multiplication and Characterisation

| Country       | Actual      |               | Proposed    |               |
|---------------|-------------|---------------|-------------|---------------|
|               | Multiplied  | Characterized | Multiplied  | Characterized |
| Angola        | 12          | 74            | -           | 70            |
| Botswana      | 50          | 50            | 150         | -             |
| DRC           | -           | -             | -           | -             |
| Lesotho       | 446         | 446           | 419         | 419           |
| Malawi        | 221         | 28            | 196         | 196           |
| Mauritius     | 145         | -             | -           | -             |
| Mozambique    | 165         | 165           | 195         | -             |
| Namibia       | 35          | -             | 246         | -             |
| South Africa  | -           | -             | 660         | 660           |
| Swaziland     |             |               |             |               |
| Tanzania      | 246         | 246           | -           | -             |
| Zambia        | 703         | -             | 658         | -             |
| Zimbabwe      | -           | -             | -           | -             |
| <b>Totals</b> | <b>2023</b> | <b>1009</b>   | <b>2524</b> | <b>1345</b>   |

### 4.2.1 Seed Handling, Storage and Monitoring

More freezer breakdowns were experienced this year than before. Frequent electric load-shedding imposed by the Zambia Electric Supply Company (ZESCO) had a profound effect on functioning of freezers which resulted in thirty eight freezers being serviced and six replaced for newer ones.

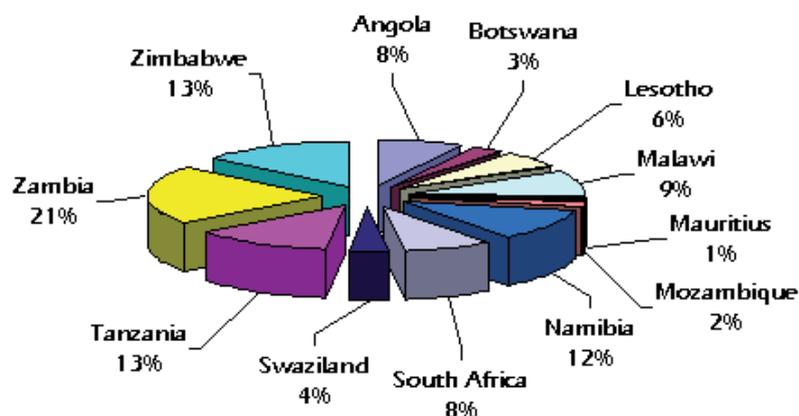
Proper seed handling procedures at the Åke Wellving Memorial Genebank at SPGRC is fundamental to the long-term, cost-effective and efficient conservation of the region's collections. To ensure high viability of collections for long time, 1290 samples were monitored. From this total, 1243 samples scored above 85% viability whereas less than 3% of them scored viabilities just below 85% and will be regenerated in the next season.



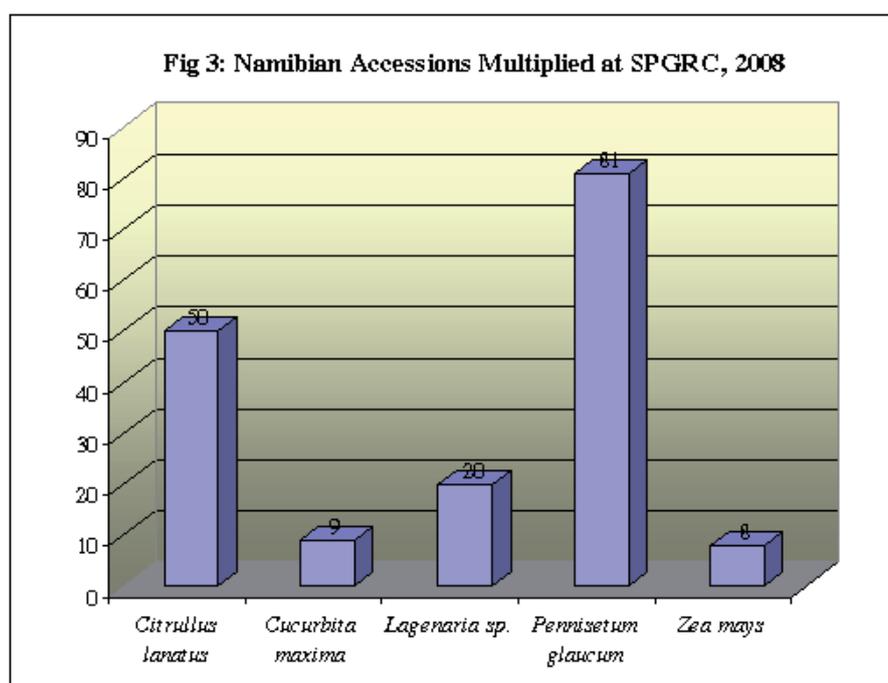
#### 4.2.2 Regeneration and Multiplication

A decision guide was made by the network in 2007 that affirmed SPGRC should assist national genebanks to multiply collections that were not yet deposited at SPGRC but still not in ready condition for long-term conservation. As a result, 168 pearl millet samples from the Namibian NPGRC were multiplied at SPGRC to increase seed quantities to meet both the Base and Active collections needs. In addition, 612 accessions were regenerated to improve viabilities to above 85% threshold.

**Fig 2: Accessions Held at SPGRC from NPGRCs as of February 2009**



During the season, SPGRC retrieved from the base collection 612 batches including 560 *Sorghum bicolor*, 11 *Lagenaria* sp., 30 *Zea mays* and 11 *Cucurbita* sp. for regeneration/multiplication. Also, SPGRC assisted Namibian NPGRC to multiply/regenerate 168 accessions as shown in the figure below.



#### 4.2.3 Increasing and Improving Regional Capacity for Seed Drying

As a complement to Sida and NordGen to the network, an agreement was signed in 2008 between the Trust and SPGRC in order to carry out left-over activities from the earlier project with the aim of increasing and improving regional capacity for seed drying.

Seven national genebanks including Botswana, Lesotho, Mauritius, Tanzania, Zambia and Zimbabwe were earmarked for staff training and servicing of driers. This support was planned to train at least three staff for each genebank. Four staff members were trained in Mozambique, 2 in Zambia, 7 in Zimbabwe, 4 in Lesotho, 5 in Tanzania, and 6 in Botswana. Work was carried out as planned except in Mauritius where training was not done due to problems associated with transport.

Service to the driers included among other things: condenser fan motor repairs, re-gassing, unclogging air ducts, repairing fans and other parts as well as replacing air filters.

It is hoped that the built capacity through training in basic servicing and maintenance of driers would be sustained through further and in-house trainings for staff who did not have chance to attend the conducted trainings.

#### 4.2.4 Regeneration of Regionally Prioritised Collections – Support by Trust

A consolidated project proposal for regeneration of the region's regionally prioritised crops was submitted to the Board of SPGRC for review at the 2008 Ordinary Board meeting.

The Board recommended changes in the proposal and that the document should be circulated to Member States for approvals by policy authorities. The revised draft document of grant agreement was circulated to Member States for consideration and approval. Five Member States have approved the draft grant agreement and accepted to participate in the project.

#### 4.2.5 Visits to Swaziland and Zimbabwe

The objective of field missions to Swaziland and Zimbabwe were to provide technical backstopping and provide assistance in ensuring agreed genebanking standards are adhered to.

##### Swaziland

History shows that Swaziland has been understaffed for many years and this implies that it has operated below the required standard for the years.

During the visit, a meeting with the Principal Secretary for Agriculture, Director of Agricultural Research and NPGRC Curator, the quest for more staff was discussed in details. The Principal Secretary committed his office to ensuring that as soon as job descriptions for the vacant positions are handled to his office, he would be able to act on the matter.

##### Zimbabwe

The visit was a follow-up to assess progress on agreed tri-partite one-year programme developed by Project Technical Advisor, *SPM-Ex-Situ* Conservation and the NPGRC Curator in September 2007, whose aim was to improve genebanking status in Zimbabwe. The basic guiding principles in designing a one-year programme were to ensure that the process is done in the most economical manner with highest level of efficiency without compromising genebanking standards. The genebank has since restructured and was expected to implement the programme accordingly.

Also during the visit, discussions related to the Draft Tripartite Grant Agreement proposed for regeneration of regionally prioritised collections were conducted. Meetings were held with relevant Zimbabwean authorities and the document was yet to be processed by the Finance Board whose clearance would pave way for approval by the Principal Secretary for the Ministry of Agriculture.



### **4.3 Documentation and Information**

#### **4.3.1 Hardware and Software**

The process for procurement of 4 desktop and 3 laptop computers together with a number of applications software was initiated and deliveries are expected in the First Quarter of 2009. Long procurement procedures are a result of the sophisticated and specialised nature of some software. The acquisitions are anticipated to improve information and data management at SPGRC.

Routine maintenance of the local area network and the rest of computer equipment as well as software has been ongoing, to ensure smooth running of documentation and information provision.

The recently installed telephone call-log system meant to monitor usage and foil possible abuse has been tested and is working well. Initial results show reduced number of unnecessary calls made. Further monitoring with statistical analysis will continue in order to appraise its economical advantages.

#### **4.3.2 Database Development**

Development of the web-based SDIS continued and a prototype is scheduled for initial testing by mid-2009 after servers are availed from NGB to replace the current stand-alone system. With the new system, NPGRCs and SPGRC will be able to instantly update their databases which will be accessible globally through the web.

The SDIS has continued working well in all NPGRCs and at SPGRC except for a crash reported case of Tanzanian NPGRC database. The Documentation staff helped Tanzania through online instructions to re-install and back-up the system, and it is now back to normal.

With good maintenance policy and procedures, the LAN has continued working at SPGRC with no significant disruptions.

The Section has added three (3) more crops on the characterization module, provided descriptors for the respective crops are made available.

#### **4.3.3 Information and Communications**

##### ***Network News***

The SPGRC Network Newsletter issues for January-June 2008 and July-December 2008 were published and posted to all stakeholders in time.

As agreed during the Annual Technical Review and Planning meeting in September 2008, the dedicated special newsletter issue planned for December 2008 to recognize and honour farmer conservationists who collaborate with SPGRC could not be fulfilled because no article was received from any NPGRC early enough to publish.

With the 2008/09 SPGRC annual report published and distributed in time, there are no backlogs on network news.

An eco-geographical study and review of vegetatively propagated crop species occurring in Swaziland and Zambia was published and distributed in 2008. It is one output of the Regional Crop Working Groups and was edited by Mr Godfrey P. Mwila and the late Michael H. Nxumalo.

### ***Connectivity to the Internet***

The NPGRCs are at different levels of connectivity. For example, Angola, Botswana, Lesotho, Namibia and Zimbabwe have Local Area Networks (LANs) and have reliable access to the Internet. While South African and Mozambican NPGRCs are networked but not connected to the Internet, the Zambian NPGRC has a LAN and connected to the Internet but which is not readily available, due to low bandwidth as it is connected by radio to the main building where routers are located. Other countries like Malawi, Swaziland and Tanzania NPGRCs neither have LANs nor connectivity to the internet.

In anticipation of the forthcoming web-based version of SDIS, it has become necessary to have all NPGRCs connected through a proposal forwarded to the donors through the Project Technical Advisor. Some countries will need communication satellites (VSATs – *Very Small Aperture Terminals*) and others, servers. SPGRC was reliably informed that funds are available for this and implementation should start soon. This will also avert poor communication between the network stakeholders.

### ***Publicity and Awareness of SPGRC***

More than 1,500 copies of the SPGRC network newsletter for the first half of 2008 together with about 1,000 copies of 2009 calendars and 250 Christmas greetings cards were published and distributed to the stakeholders in December 2008.

In order to guarantee SPGRC staff access to the Internet, the Internet connectivity has been maintained throughout by ensuring timely payment of subscriptions with the service provider as well as proper and professional maintenance of the servers at the Centre.

A new dynamic SPGRC web portal has been launched and is undergoing testing and updating before it is finally uploaded on the web for public access.



In order to increase institutional visibility, SPGRC participated in the Zambia Agricultural and Commercial show in July 2008. As it has been a tradition, SPGRC joined other public agriculture-sector organisations present in Lusaka under the *aegis* of the Ministry of Agriculture and Cooperatives, which won the best-pavilion prize at the show. SPGRC staff had opportunity to explain our roles and contributions to the SADC community and exchanged ideas and expertise in plant germplasm conservation with stakeholders, including farmers, researchers and policy makers.

A DvD showing SPGRC activities shot last year is being updated with more activity scenarios and photos being added that depict successes and future plans of the network. Other radio and television programmes will be prepared where and when appropriate.

A DvD showing Malawian seed fair activities displayed to the meeting raised an inspiration for other NPGRCs to emulate and produce their own. It was also encouraged that such DvD, where possible, should be uploaded to the web to enhance a wider access.

#### **4.3.4 SPGRC Library**

With frequent cataloguing, the library maintains well catalogued publications and ensures satisfactory stocking of documents.

New books continued to be acquired as well as subscriptions to relevant journals and other publications that are of interest to the work of conservation and utilization of plant genetic resources.

The Section started follow-up on the publications ordered in February 2008 from Elsevier Publications which are yet to be delivered to date. Elsevier Publishers has acknowledged non-delivery and promised to send the books as soon as possible.

Two extra book shelves for the library were acquired during the reporting period, easing space for publications.

#### **4.3.6 Support to NPGRCs**

Following requests made during the 2008 SPGRC/NPGRCs technical review and planning meeting, visits were made to Botswana and South Africa in November/December 2008 to technically support the NPGRCs in terms of data management.

In both countries, trainings were conducted for NPGRC staff in data entry, updating, management and searching of information on SDIS. Besides that, both genebanks material placements were re-arranged so as to tally with SDIS for their easy retrieval when and where needed.

Following the SPM – *in-situ* visit to the Zimbabwean NPGRC, it was realised that data capture

and entry into SDIS database were not tallying. A decision was made that Documentation staff revisit the NPGRC in order to keep its database up-to-date.

## 5. OTHER NEWS

### 5.1 Potential Regional Project: African Citrullus/Curcurbit Network

A project on 'Watermelons for life' was discussed at the annual Technical Review and Planning meeting in September 2008, in particular, to find the best options for hosting the project at SPGRC.

It is a DANIDA research project with the title 'Watermelons for life: The potential of indigenous African genetic resources (2008-2010)' and is anchored at the Faculty of Life Sciences (formerly Royal Veterinary and Agricultural University), University of Copenhagen, Denmark, with collaborators in Kenya (KARI/NPGRC), Mali (IER), Mozambique (IIAM) and Tanzania (NPGRC).

The potential of local genetic resources is in focus in the project, and involves surveys to obtain information about cultivation practices and uses, as well as seed collection to study the genetic diversity and potential of the local watermelon resources.

It was suggested that the Network could meet in connection with or as extension of other yearly activities at SPGRC, so that cost and time involved in travelling are kept at a minimum for those who are already attending a meeting at SPGRC.

At the moment, the Danida watermelon project does not have funding for such a network, but promises that if there is a general interest for the overall idea of having an African Citrullus/Curcurbit Network, then it can do what it can to seek funding.

The project staff expressed ignorance on whether there were any other such crop based networks – with focus on local genetic resources - already existing in Africa. If this is the case, then they would be pleased to hear about experiences from such networks.

### 5.2 Regional Project Proposal for Enhancement of Capabilities in Conservation and Utilisation of PGRs

The Southern African Network for Biosciences (SANBio) has identified genebanking as one of the priority areas for the SADC region aimed at ensuring sustainable food security and socioeconomic development of the people of the region and SPGRC has been identified as a regional centre strategically placed to coordinate this activity. The SANBio formed a Task Force to advise the network in the development of a five-year regional project entitled "enhancement of capabilities for conservation and utilisation of plant genetic resources in the SADC region for food security".



The Task Force which is chaired by the Head of SPGRC met once in June 2008 and in September 2008 and produced a final project proposal document that was submitted to SANBio Secretariat for it to forward it to NEPAD Secretariat for possible funding.

Participating institutions in the project will include interested NPGRCs from SADC Member States. In the process of executing the project, all expertise and knowledge from the region will be exploited thus including other institutions and organizations such as National Herbaria, Botanical and Forestry Research Institutes, Universities, NGOs, the private sector, as well as other regional networks, *etc.*

### **5.3 Global Plan of Action Project Developments in Angola, Malawi and Zambia**

The Global Plan of Action (GPA) for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (PGRFA) is part of the FAO Global System that aims at ensuring the conservation and promoting sustainable utilisation of PGRFA as a basis for food security as well as promoting a fair and equitable sharing of the benefits arising from its use. It also confirms the needs and individual rights of farmers, develops and/or strengthening policies and legislative measures to assist countries and institutions responsible for conserving and using PGRFA, and identifies priorities for action, strength, in particular, national programmes, as well as regional and international programmes, including education and training, for the conservation and utilization of PGRFA.

Angola has so far participated in the preparation of the second country report of PGRFA and the establishment of the National Information Sharing Mechanism (NISM). This information will be based on the use of a specialized database so as to allow the introduction of data from the different stakeholders and areas related to the conservation and utilization of PGRFA in Angola.

The first workshop was organized and held in Luanda on 28<sup>th</sup> November 2007 where Bioversity International elaborated on GPA implementation. A second workshop was held in Luanda on 3<sup>rd</sup> and 4<sup>th</sup> of March 2008.

To this moment, NFP is answering the questionnaire and completing the information on the common tables. More information is still being added to the GPA database and the questionnaire is still being completed.

Malawi has implemented the National Information Sharing Mechanism (NISM) which is a partnership among stakeholders that contribute to the conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) in Malawi.

Through it, available at (<http://www.pgrfa.org/gpa/mwi/welcome.htm>), the country has created a set of tools agreed by the FAO Commission on Genetic Resources for Food and Agriculture and the country has finalized its national report.

The Zambian NPGRC has completed the project and has gone through evaluations with stakeholders. A final GPA report shall be ready by the second quarter of 2009.

Lists of indicators and a reporting format to monitor the implementation of the Global Plan of Action and an information sharing system including a database and a search engine, which includes the most comprehensive inventory of national PGRFA-related institutions, experts, publications, laws, and projects, as well as, of cultivated varieties, are part of the implementation of GPA in the participating countries.

#### **5.4 Construction of Biotechnology Laboratory at SPGRC**

The Sida has availed funds for the construction of the Biotechnology Laboratory at SPGRC. The work is scheduled to start after the long rains in April 2009.

#### **5.5 Farm**

In 2007/08 season, 291 x 50kgs bags maize, 9 x 50kgs bags soyabeans and 3½ x 50kgs common beans were harvested from the farm. The relatively poor yields were attributed to excessive rainfall experienced in the season. A total of 1, 241.4mm rainfall was recorded compared to 967mm of rainfall recorded in the 2006/07 season.

### **6. SYNOPSIS FROM THE ANNUAL PLANNING MEETING**

#### **1.1 Community Seed Banks**

Having looked at the expenses involved in establishing and maintaining community seed banks, it was suggested at the meeting that SPGRC commission a study to make impact assessment of seed banks in the pilot countries of South Africa, Zimbabwe (ICRISAT) and Swaziland for the region.

Report of the findings of the study shall be discussed at the next planning meeting in 2009. It will then be decided whether it is worthwhile establishing and maintaining the seed banks or recommend other alternatives to it.

#### **6.2 Type of Pollination Bags**

There have been concerns from NPGRCs that the pollination bags currently in use are seriously being perforated by birds to access the seeds.

It was suggested that the brown bags (vs white bags) seem to be less attractive and should be used more.

In order to avoid huge losses of seeds eaten by birds, NPGRCs were asked to consider planting a catch crop alongside the main crop so that the pest birds feast on the catch crop while the



main crop is ripening and maturing. Another alternative is to grow pearl millet and sorghums side by side as birds are attracted to pearl millet which is sweeter, thus saving the sorghums from predation.

### **6.3 Field Genebanks**

Considering the costs of maintaining field genebanks and given that SPGRC policy is funding the establishment and leaving to countries the maintenance, reconsideration to put sustainability mechanisms in place is inevitable.

The meeting suggested that cryopreservation should be considered as an alternative to field genebanks. Cryopreservation facilities at some designated NPGRCs and SPGRC could help serve the region.

Besides the proposed installation of cryopreservation facility at SPGRC through a SANBio proposal, Tanzanian NPGRC was noted to have the cryopreservation laboratory but is without equipment and consumables.

### **6.4 Influence on Development Companies that Damage PGRs**

The stakeholders were informed that in the course of executing development programmes, environment is damaged and lots of PGRs get lost. The NPGRCs were encouraged to ensure that all Environmental Impact Assessment studies in their respective countries take account for PGR losses that can be substantiated by NPGRCs and like institutions. A recommendation was made that companies doing any development activities that threaten loss of PGR should be held accountable for saving and restoration of the materials.

## **7. OBITUARY**

The SPGRC Network regrets to announce the death of **Mr Tihaloganyo Ounce OFENTSE** which occurred on 6<sup>th</sup> April 2008 in Gaborone, Botswana after succumbing to cancer attack. He was buried at his home village on 12<sup>th</sup> April 2008.

Until his death, Mr Ofentse was the Curator for the Botswana NPGRC, a position he assumed since 1997.

Born on 12<sup>th</sup> October 1971, Mr Ofentse did his primary and secondary education respectively in Mmadinare and Babonong, Botswana between 1979 and 1990. He thereafter, proceeded to do his BSc (Agriculture) studies at the University of Botswana from 1992 to 1996 before pursuing an MSc in Conservation and Utilization of PGR at the University of Birmingham between 2000 and 2001.

Besides being a Curator, he was also a representative of The Botswana Department of Agricultural Research in the national steering committee of the Desert Margins Project of GEF and in the Advisory Board of the Department of crop science and production of the Botswana College of Agriculture. He was also part of the national technical team of the Millennium Seed Bank Project (MSBP).

Mr Ofentse will be remembered for his dedicated intellectual and physical involvement in the establishment and enhancement of PGR work for Botswana and SADC region. He will be sorely missed by the SPGRC network.

***May His Soul Rest in Eternal  
Peace***





## 8. FINANCIAL REPORT 2007/2008

**Table 5: Income and Expenditure Statement for the Year Ended 31<sup>st</sup> March 2008**

|  | 2007/08, US\$    | 2006/7, US\$   |
|--|------------------|----------------|
| <b><u>Income</u></b>                           |                  |                |
| Contributions from Member States               | 843,35           | 608,738        |
| Donations and grants                           | 93,820           | 146,122        |
| Interest receivable                            | 2,225            | 1,588          |
| Amortisation of capital grants                 | 85,497           | 84,737         |
| Exchange rate gains                            | (28,796)         | 130,546        |
| Other income                                   | 14,868           | 11,916         |
| Profit on sale of fixed assets                 |                  | 5,280          |
| <b>Total Income</b>                            | <b>1,010,969</b> | <b>988,927</b> |
| <b><u>Expenditure</u></b>                      |                  |                |
| <b>Operating Expenses</b>                      |                  |                |
| Employee benefits expense                      | 511,160          | 478,529        |
| Transport, subsistence and conference services | 40,128           | 38,008         |
| General expenses and supplies                  | 138,713          | 124,820        |
| Communications                                 | 23,918           | 20,898         |
| Audit costs and professional fees              | 11,010           | 8,030          |
| Depreciation                                   | 85,497           | 84,737         |
| <b>Sub-Total</b>                               | <b>810,426</b>   | <b>755,022</b> |
| <b>Programme Expenses</b>                      |                  |                |
| Member States                                  | 130,892          | 104,615        |
| Grants   | 14,544           | 26,154         |
| <b>Sub-Total</b>                               | <b>145,436</b>   | <b>130,769</b> |
| Finance Costs                                  | 4,881            | 3,807          |
| <b>Sub-Total</b>                               | <b>4,881</b>     | <b>3,807</b>   |
| <b>Total Expenditure</b>                       | <b>960,744</b>   | <b>889,598</b> |
| <b>Operating Surplus</b>                       | <b>50,225</b>    | <b>99,329</b>  |

**Source:** SADC Financial Statements for the Year Ended 31<sup>st</sup> March 2008

**Table 6: Assets and Liabilities Statements as at 31<sup>st</sup> March 2008**

|  | 2007/08, US\$          | 2006/07, US\$           |
|--|------------------------|-------------------------|
| <b>ASSETS</b>                                    |                        |                         |
| <b><u>Non-Current Assets</u></b>                 |                        |                         |
| Property, plant and equipment                    | 1,955,222              | 1,993,011               |
| <b><u>Current Assets</u></b>                     |                        |                         |
| Debtors and prepayments                          | 410,893                | 257,707                 |
| Cash and cash equivalents                        | 140,540                | 316,140                 |
| <b>Total Assets</b>                              | <b><u>2,506,65</u></b> | <b><u>2,566,858</u></b> |
| <b>Member States Funds and Liabilities</b>       |                        |                         |
| <b>Member States Funds</b>                       |                        |                         |
| Reserve fund                                     | 20,140                 | 20,110                  |
| Accumulated fund                                 | 324,965                | 176,466                 |
| Staff loan fund                                  | 24,831                 | 24,749                  |
|  | <u>369,936</u>         | <u>221,325</u>          |
| <b><u>Non-Current Liabilities</u></b>            |                        |                         |
| Post-employment benefit                          | 88,779                 | 118,233                 |
| Deferred grant income                            | 1,901,401              | 1,986,898               |
| Sub-total  | <u>1,990,180</u>       | <u>2,105,131</u>        |
| <b><u>Current Liabilities</u></b>                |                        |                         |
| Payables   | 141,642                | 139,958                 |
| Deferred grant income                            | 4,897                  | 100,444                 |
| Sub-total  | <u>146,539</u>         | <u>240,402</u>          |
| <b>Total Member States Funds and Liabilities</b> | <b>2,506,655</b>       | <b>2,566,858</b>        |

**Source:** SADC Financial Statements for the Year Ended 31<sup>st</sup> March 2008



**Table 7: Cash Flow Statement for the Year Ended 31<sup>st</sup> March 2008**

|  | 2007/08, US\$    | 2006/07, US\$    |
|--|------------------|------------------|
| <b><u>Cash Retained from Operations</u></b>        |                  |                  |
| Surplus for the year                               | 50,225           | 99,329           |
| <b><u>Adjustments</u></b>                          |                  |                  |
| Depreciation                                       | 85,497           | 84,737           |
| Amortisation                                       | (85,497)         | (84,737)         |
| Profit on disposal of fixed assets                 | -                | (5,280)          |
| Interest received                                  | (2,225)          | (1,588)          |
| Prior year adjustments                             | -                | -                |
|  | <b>48,000</b>    | <b>103,021</b>   |
| Receivables  | (153,184)        | (105,482)        |
| Payables   | 1,684            | (21,502)         |
| <b>Net Cash from Operations</b>                    | <b>(103,500)</b> | <b>23,963</b>    |
| <b><u>Cash Flows from Investing Activities</u></b> |                  |                  |
| Purchase of fixed assets                           | (47,708)         | (18,592)         |
| Proceeds on disposal of fixed assets               | -                | 5,280            |
| Interest received                                  | 2,225            | 1,588            |
| <b>Net cash flows from investing operations</b>    | <b>(45,483)</b>  | <b>(11,724)</b>  |
| <b><u>Cash Flows from Financing Activities</u></b> |                  |                  |
| Member States funds                                | 98,386           | (57,691)         |
| Gratuity fund                                      | (29,454)         | 59,602           |
| Development partners' fund                         | (181,044)        | (140,736)        |
| <b>Net Cash Flows from Investing Activities</b>    | <b>(112,112)</b> | <b>(138,825)</b> |
| Net increase in cash and cash equivalents          | (175,600)        | (100,335)        |
| Opening cash and cash equivalents                  | 316,140          | 416,475          |
| <b>Closing Cash and Cash Equivalents</b>           | <b>140,540</b>   | <b>316,140</b>   |

**Source:** SADC Financial Statements for the Year Ended 31<sup>st</sup> March 2008

## 9. APPENDICES

## Appendix I: Members of the Board of SPGRC

|                           |                             |
|---------------------------|-----------------------------|
| Dr G L Maggs-Kölling      | - Namibia (Chairperson)     |
| Dr J Jafhta               | - South Africa (Vice-Chair) |
| Dr A Alcochete            | - Angola                    |
| Dr P O P Mosupi           | - Botswana                  |
| Dr Mbiyaki Nkonko         | - DRC                       |
| Dr M M Ranthamane         | - Lesotho                   |
| Dr A P Mtukuso            | - Malawi                    |
| Mr P Munisse              | - Mozambique                |
| Mr Y Mungroo              | - Mauritius                 |
| Dr S Kunene               | - Swaziland                 |
| Dr M M M Msabaha          | - Tanzania                  |
| Dr S W Muliokela          | - Zambia                    |
| Mrs D. Hikwa              | - Zimbabwe                  |
|                           |                             |
| <i>Ex-officio Members</i> |                             |
| Mrs M Nyirenda            | - SADC                      |
| Dr Jojo Baidu-Forson      | - Bioversity                |
| Dr M B Fatih              | - NordGen                   |
| Dr Torsson Anderson       | - Sida                      |
| Dr Paul M Munyenembe      | - SPGRC (Secretary)         |



## Appendix II: SPGRC Staff Members

|                            |  |
|----------------------------|--|
| Dr Paul M Munyenyebe       | Head, SPGRC (18 July 2008)   |
| Ms Thandie J Lupupa        | Senior Programme Manager – <i>In-Situ</i> Conservation (16 May 2006) |
| Mr Barnabas W Kapange      | Senior Programme Manager - Documentation & Information (09 May 2006) |
| Mr Lerotholi L Qhobela     | Senior Programme Manager – <i>Ex-Situ</i> Conservation (15 May 2006) |
| Mrs Mary B Phiri           | Assistant Administrative Officer (01 March 2000)                     |
| Ms Florence C Chitulangoma | Assistant Finance Officer (08 March 1993)                            |
| Mrs Peggy S Ng'ono         | Technical Officer-Conservation (01 June 2005)                        |
| Mr Kennedy K Hamudulu      | Technical Officer - Documentation & Information (01 March 1994)      |
| Mr Ferdinand Mushingi      | Technical Officer – <i>In situ</i> (01 March 2004)                   |
| Mrs Phyllis M Litula       | Personal Secretary (12 November 2001)                                |
| Mr Wilbroad M Chashi       | Senior Finance Clerk (01 July 2002)                                  |
| Mr Alexius M Nyambe        | Driver (01 February 1991)  |
| Mr Kapelwa E Songa         | Typist/Receptionist (01 September 1989)                              |
| Mr Gibson Zulu             | General Worker (01 August 1989)                                      |
| Mr John Mfwembe            | General Worker (04 September 1989)                                   |
| Mr Wale Banda              | General Worker (01 April 1990)                                       |
| Mr Olipen Phiri            | General Worker (05 January 2009)                                     |

**Appendix III: List of Some Prominent Visitors to SPGRC (2008/2009)**

|                             |  |
|-----------------------------|--|
| Hon. Sarah Sayifwanda, MP   | Minister for Agriculture & Cooperatives, Zambia  |
| Prof Isaac K Phiri          | PS, Ministry of Agriculture & Cooperatives, Zambia   |
| Mr Jeswald S Majuva         | Counsellor, Tanzania High Commission, Lusaka, Zambia   |
| H. M. Ms Sinikka Antila     | Ambassador, Embassy of Finland, Lusaka, Zambia   |
| Ms Wilma Viljanmoa          | Counsellor, Embassy of Finland, Lusaka, Zambia   |
| Mr Oliver Mwale (+students) | Copperbelt University, P O Box 21692, Kitwe, Zambia  |
| Sally Burrows               | FAO Evaluation Service, Rome, Italy  |
| Tomme R. Young              | Team Leader, FAO B-1 Evaluation (Evaluation of FAO's work using International instruments for PGR), Inderbies 4, 53129 Bonn, Germany |
| L Tembo                     | University of Zambia, Crop Science Department, P O Box 32379, Lusaka, Zambia   |
| D. Seabo                    | Botswana College of Agriculture, P/Bag 0027 Gaborone, Botswana   |
| Mr Simanga Mwale            | Journalist, RCCA, Lusaka, Zambia   |
| Ms Joyce Mwanza             | Journalist, P O Box 51381 Lusaka, Zambia   |
| Mr Simanga Moyo             | Journalist, RCCA, Lusaka, Zambia   |
| Dr Stephen Muliokela        | Director, GART, P O Box RW 50834 Lusaka, Zambia  |
| Dr Choolwe Beyani           | University of Zambia, History Department, P O Box 32379, Lusaka, Zambia  |
| Mr Mwansa Mwanamwenge       | Natural Resources Development College (NRDC) P O Box 310099, Lusaka, Zambia  |
| Mr Jere E. Chimwene         | Natural Resources Development College (NRDC) P O Box 310099, Lusaka, Zambia  |
| Dr Brad Fraleigh            | Agriculture & Agri-Food, Canada  |
| Dr Wilson Marandu           | Bioversity, AVRDC-RCA, Arusha, Tanzania  |
| Ms M. S. Milupi             | P. O. Box 320090, Lusaka, Zambia   |



#### **Appendix IV: SPGRC Publications in 2008/2009**

**Alcochete, A. A. N., Rangel P. H. N., and Ferreira M. E. (2005).** Mapping of quantitative trait loci for thermosensitive genic male sterility in *indica* rice. *Pesq. agropec. bras., Brasília*, v.40, n.12, p.1179-1188, dez. 2005.

**Alcochete, A. A. N., Rangel, P. H. N. and Ferreira, M. E. (2008).** Genetic structure of rice samples from a germplasm bank. *Scientific Research and Essays* Vol. 3 (12), pp. 577–598, December 2008.

**Kapange, B. (2008).** Using ICTs in Managing Network Genebanks: The Case of SADC Plant Genetic Resources Centre (SPGRC). Paul Cunningham and Miriam Cunningham (Eds). IST-Africa 2008 Conference (Windhoek, Namibia) Proceedings. IIMC International Information Management Corporation, 2008, ISBN: 978-1-905824-07-6.

**Mapunda, L. N. D. (2008).** *Habenaria occlusa*, *Eulophia schweinfurthii*: Rare, Extinct or Critically Endangered? *SPGRC Network News – A Publication of SADC Plant Genetic Resources Network*, Vol. July – Dec. 2008. Lusaka, Zambia.

**Notes**