



Solanum catombelense Peyr.

Crop wild relatives conservation in the SADC region

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¹Bioversity International and ²University of Birmingham

Global Crop Diversity Trust, Bonn, Germany, 1 December 2015



What is the CGIAR?

- 44 year old organization – redefined as global research partnership of 15 international research centers for a food secure future in 2008
- Strategy and Result Framework:
 - Reduced poverty
 - Improved food and nutrition security for health
 - Improved natural resource systems and ecosystem services
- 15 CGIAR Centers, including Bioversity International
- CGIAR Research Programmes



CGIAR

Science for a food secure future

Bioversity's mission

Bioversity International delivers **scientific evidence**, **management practices** and **policy options** to use and safeguard agricultural and tree biodiversity to attain sustainable global food and nutrition security.



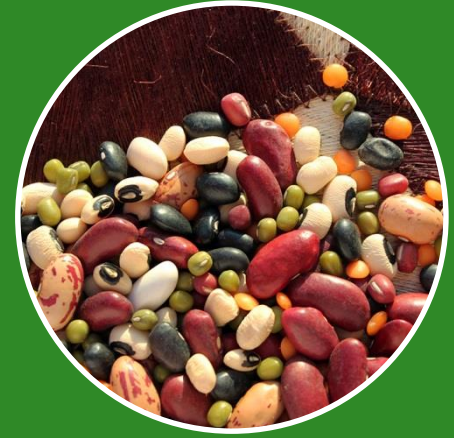
Biodiversity International initiatives



**Healthy diets
from
sustainable food
systems**



**Productive and
resilient farms,
forests and
landscapes**



**Effective
genetic resources
conservation
and use**

Crop wild relatives (CWR)

Wild plant species closely related to crops,
including wild ancestors

Account for **about 21% of the world's flora**
(Maxted and Kell 2009)

Important socio-economic resource that offers
novel genetic diversity required to maintain future
food security



Global importance

CBD Strategic Plan for Biodiversity 2011 – 2020 (20 Aichi targets)



Target 13

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

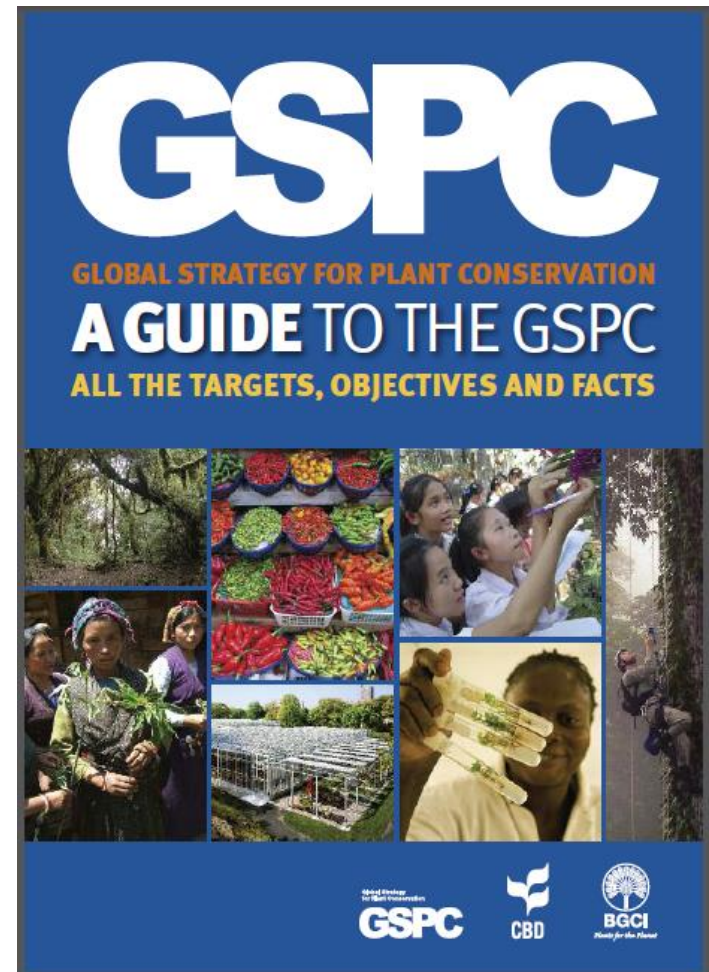
Global importance

Global Strategy for Plant Conservation 2011 – 2020 (16 targets)

Target 9: 70 % of the genetic diversity of crops including their **wild relatives** and other socio-economically valuable plant species conserved

Target 1: An online flora of all known plants = **inventory of CWR**

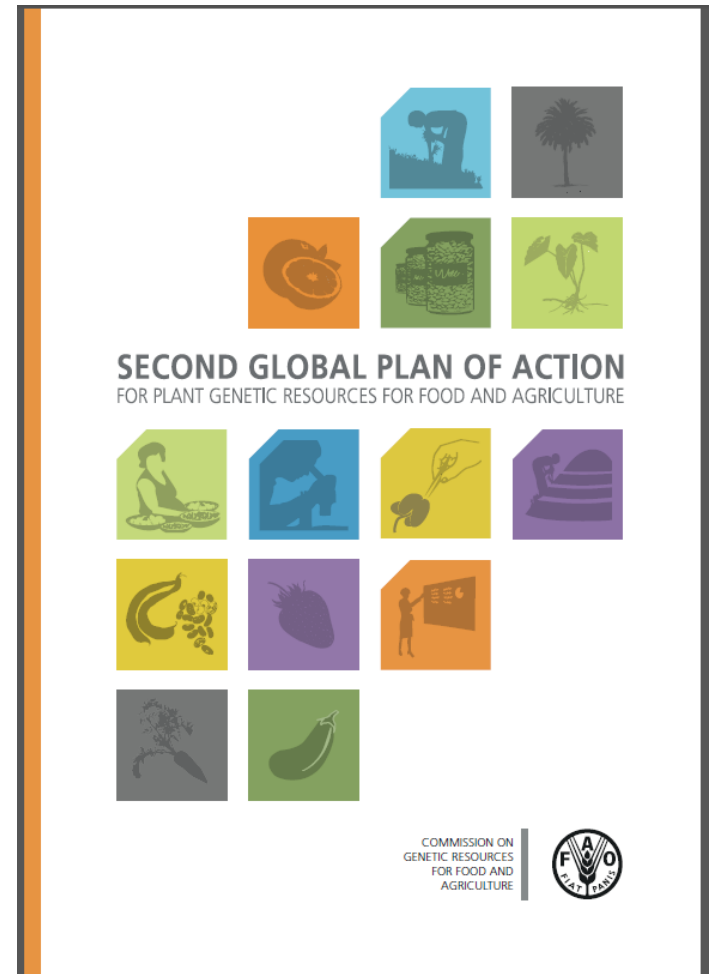
Target 2: An assessment of the conservation status of all known plant species as guide for conservation action = **conservation status of CWR**



Global importance

Second Global Plan of Action for PGRFA 2011 (18 activities)

*Activity 4: Promoting *in situ* conservation and management of crop wild relatives and wild food plants*





United Nations Decade on Biodiversity

Ref.: SCBD/SAM/DC/DCo/84808

3 August 2015

NOTIFICATION

Strengthening the *in situ* conservation of Plant Genetic Resources for Food and Agriculture through incorporation of Crop Wild Relatives under areas important for biodiversity in Protected Area Networks and other effective area-based conservation measures

(Aichi Biodiversity Targets 7, 11, 12 and 13)

(Global Strategy for Plant Conservation Targets 5, 6, 7 and 9)

Dear Madam/Sir,

As part of their shared mandates, the secretariats of the Convention on Biological Diversity (CBD) with its Financial Mechanism – the Global Environment Facility (GEF), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and its Benefit Sharing Fund, the Food and Agriculture Organization of the United Nations (FAO)'s Commission on Genetic Resources for Food and Agriculture (CGRFA), and the Bioversity International (a member of the CGIAR Global Partnership on Agriculture Research) have identified opportunities to further strengthen the *in situ* conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA), particularly through improved attention to, and coverage of, crop wild relatives (CWR) in protected area networks and other effective area-based conservation measures.

Further details are provided in the annex to this notification including: background information on the importance of PGRFA and CWR and how *in situ* conservation is addressed under the aforementioned governance mechanisms, organizations and initiatives; current information on status and trends of PGRFA, CWR and *in situ* conservation measures, that has identified the need for better coverage of CWR through protected areas and other effective area-based conservation measures; other initiatives relevant to the conservation of CWR; the CBD Programme of Work on Protected Areas (PoWPA); suggested actions to strengthen the inclusion of crop wild relatives into protected area networks, including in support of related initiatives; and some potential financial resources to support the conservation and sustainable use of crop wild relatives, including as might be available through GEF-6 and the Benefit Sharing Fund of the ITPGRFA.

To : CBD National Focal Points
ITPGRFA Focal Points
PoWPA Focal Points

We encourage you to review, develop or strengthen, as appropriate, your national strategies for the *in situ* conservation of CWR through protected area networks and other area-based conservation measures and the development of integrated approaches that link their conservation to their sustainable use. Such actions have the potential to make significant contribution to the synergistic achievement of Aichi Biodiversity Targets 7, 11, 12 and 13, as well as to Global Strategy for Plant Conservation Targets 5, 6, and 9.

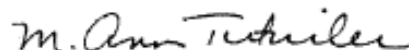
Yours sincerely,



Shakeel Bhatti
Secretary
International Treaty on Plant Genetic
Resources for Food and Agriculture



Bráulio Ferreira de Souza Dias
Executive Secretary
Convention on Biological Diversity



Ann Tutwiler
Director-General
Bioversity International



Dan Leskien
Officer-in-Charge
Commission on Genetic Resources
for Food and Agriculture
Food and Agriculture Organization
of the United Nations

Challenges

Affected by climate change, threatened by the loss, degradation and fragmentation of their natural habitats and competition from alien species

Present in protected areas, but not taken into account in PA management plans

Often located in disturbed habitats (e.g. field margins, roadsides), that are not being conserved

Underrepresented in *ex situ* collections

Identification of useful traits within CWR

Who is responsible - environmental or agricultural sector?



Wild Sorghum



Wild Coffea



Wild Asparagus

SADC Crop Wild Relatives



Full name: *In situ* conservation and use of crop wild relatives in three ACP countries of SADC Region



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'*In situ* conservation and use of crop wild relatives in three ACP countries of the SADC region' (short name - SADC Crop Wild Relatives) is a three-year project (2014-2016) co-funded by the European Union and implemented through the ACP-EU Co-operation Programme in Science and Technology (S&T II) by the ACP Group of States. Grant agreement no. FED/2013/330-210.

<http://www.cropwildrelatives.org/sadc-cwr-project/>

Objectives of the SADC CWR project

Overall objective

Enhance link between conservation and use of CWR in three ACP countries within the SADC region, as a means of underpinning regional food security and mitigating the predicted adverse impact of climate change

Specific objectives

- **Enhance the scientific capacities** within the partner countries to conserve CWR and identify useful potential traits for use to adapt to climate change.
- **Develop exemplar National Strategic Action Plans** for the conservation and use of CWR in the face of the challenges of climate change across the SADC region

Capacity and training needs assessment

Key findings

- Capacity constraints at various levels
 - Individual: taxonomy, ecogeographical surveys, seed handling, climate change modelling, data management and analysis
 - Organizational: financial, human resources, access to CWR material, outdated or incomplete data sets
 - Institutional: awareness about importance of CWR; access to areas of importance to CWR
- Data quantity and quality on CWR are poor and accessing data within the SADC region difficult
- Lack of policies on CWR

Survey in the 3 partner countries as well as SADC region - SPGRC



First regional training workshop: “*in situ* conservation of CWR and diversity assessment techniques”

Topics

Creation of CWR checklists and inventories

Prioritization of CWR for conservation

Conservation status and diversity assessment of priority CWR

Plans for implementation of conservation priorities

Relevant policy for the conservation of CWR



Mauritius, November 2014
26 participants from 14 SADC countries

Second regional training workshop: “predictive characterization and pre-breeding of CWR”

Topics

Application of eco-geography in PGR and use of CAPFITOGEN tools

Predictive characterization of a selected CWR for a specific trait

Definition and application of pre-breeding

Genebank operations critical to pre-breeding programmes

Principles for parental selection and the generation and management of variation

Components of a pre-breeding project



Pretoria, South Africa, April 2015
23 participants from 9 SADC countries



HOME

ABOUT SADC CWR

WORK PACKAGES

PROJECT PARTNERS

CONTACT

CWR PORTAL

SADC-CWR project > Work packages > Capacity Building

Capacity Building

Improving national capacities in the three ACP countries of SADC region on conservation and use of CWR

Lead partner: Bioersity International

Expected results: National capacities in the three ACP countries on conservation and use of CWR of SADC region are improved

Content: This work package will first involve a study to assess the existing capacities of different stakeholders including ministries of agriculture, environment, land use planning and forestry, national and regional universities, protected area agencies, nature conservation organizations, breeders, farmer communities and other stakeholders to conserve and use CWRs at local, national and regional levels. This action will enable the identification of specific capacity-building needs of the stakeholders and will help develop the training curriculum necessary to strengthen the capacities of the target groups.

Based on the findings of the needs assessment exercise, two tailor-made thematic regional training workshops will be carried out. The first regional training workshop will focus on *in situ* conservation of crop wild relatives and will take place in Mauritius in November 2014. The second regional training workshop will take place in South Africa in April 2015 and focus on predictive characterization and pre-breeding.

After the regional training has taken place, the project will support the three partner countries to put into practice the knowledge gained from the training courses through on-the-job training in the teams' home countries, for greater cost efficiency and impact on national crop improvement programmes.

Activities



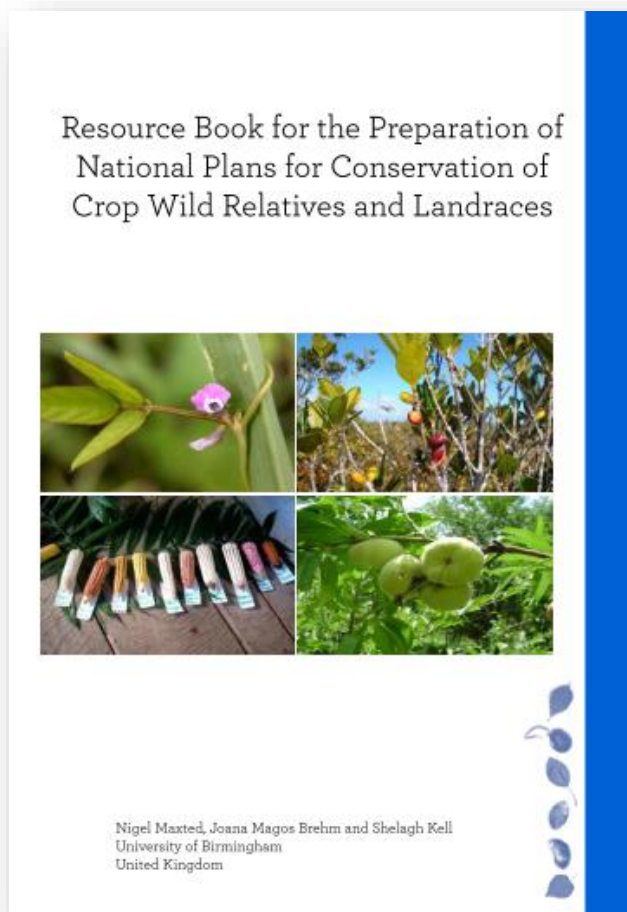
- 1.1: Conduct a needs assessment of the capacity of stakeholders in the conservation and use of CWR
- 1.2: Conduct two thematic regional training workshops on *in situ* conservation and use of CWR, based on identified capacity building needs
- 1.3: Support on-the-job training in the three ACP countries

- Home
- About SADC CWR
- Work packages
 - Capacity Building
 - Training needs assessment
 - Regional training workshops
 - STI tools
 - National SAP
 - Awareness
- Project Partners
- Contact
- CWR Portal

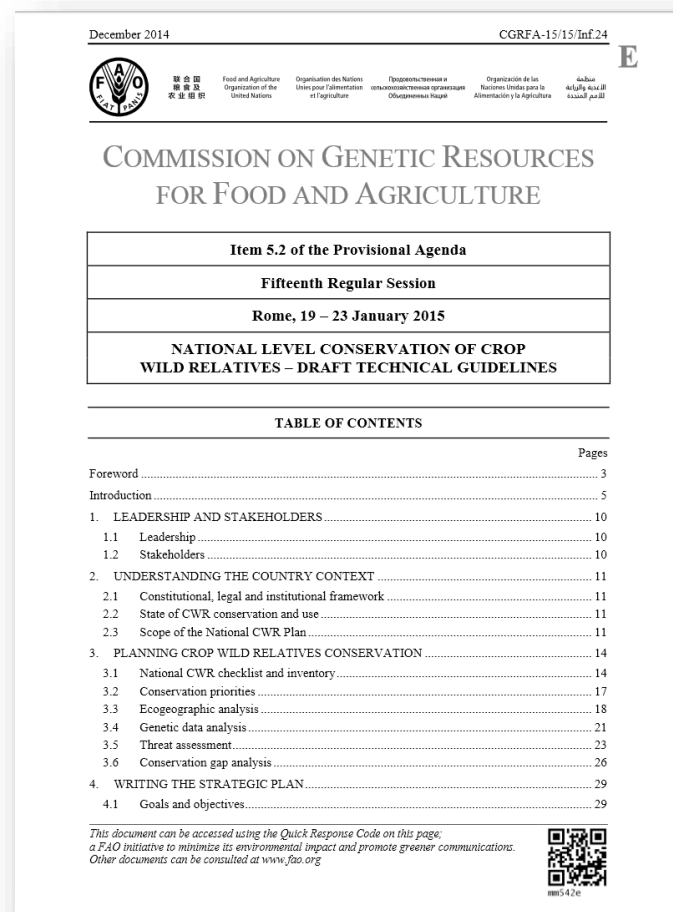
Interactive toolkit for CWR conservation - backbone

Commissioned by
FAO Commission
on Genetic
Resources for Food
and Agriculture

To aid countries
formulate National
Strategic Action
Plans for the
conservation of
CWR and LR

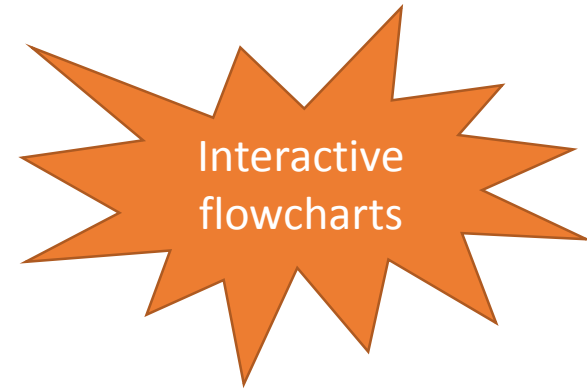
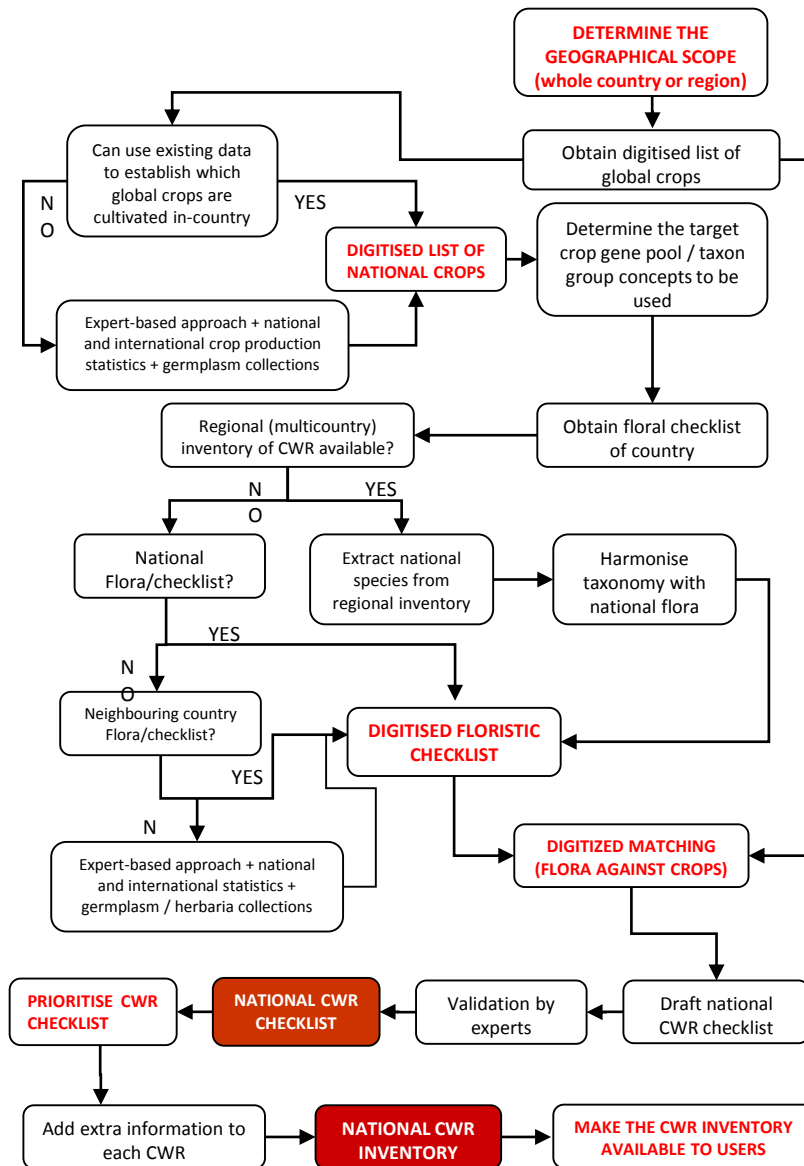


http://www.fao.org/fileadmin/templates/agphome/documents/PGR/PubPGR/ResourceBook/TEXT_ALL_2511.pdf



<http://www.fao.org/3/a-mm542e.pdf>

Interactive Toolkit for CWR Conservation – innovation



Interactive Toolkit for CWR Conservation – preview

INTERACTIVE TOOLKIT FOR CWR CONSERVATION

Export

HOME CONTEXT TO AGROBIODIVERSITY INTRODUCTION TO CWR CITATION ACKNOWLEDGEMENT

Home

Share: f t e p

National CWR
Conservation
planning

National CWR
checklist creation


National CWR
inventory creation

Genetic data analysis
of priority species



CROP WILD RELATIVES GLOBAL PORTAL

HOME CWR RESOURCES INVENTORIES AND STRATEGIES SADC-CWR CONTACTS Search



Prunus divaricata - Armenia
GUNEP/GEF CWR Project

Latest news + More

- 16 OCT 2015 Crop wild relatives - are they going to end up like the dodo?
- 8 JUL 2013 CWR Manual now available in Spanish
- 25 JUN 2013 Updated quinoa descriptor list extended to crop wild relatives

Events

International Symposium on Biodiversity and Wild Edible Species, November 1-4 2016, in Antalya, Turkey. The event is jointly organized by the General Directorate of Agricultural Research and Policies and the "Biodiversity for Food and Nutrition" Project (GEF/UNEP/FAO).

Enhancing the diversity of crop wild relatives will be one of the themes at the 4th International Symposium on Plant Genetic Resources: Genetic Resources for Climate Change, in Brisbane, Australia, 17-20 August 2014, within the framework of the 29th International Horticultural Congress.

PGR Secure and EUCARPIA joint international conference: Enhanced gene pool utilization - capturing wild relative and landrace diversity for crop improvement. NIAB Innovation farm, Cambridge, UK, 17-20 June 2014

SADC CROP WILD RELATIVES

Enhancing the link between in situ conservation and use of crop wild relatives (CWR) in the SADC region to underpin regional food security and mitigate predicted adverse impact of climate change

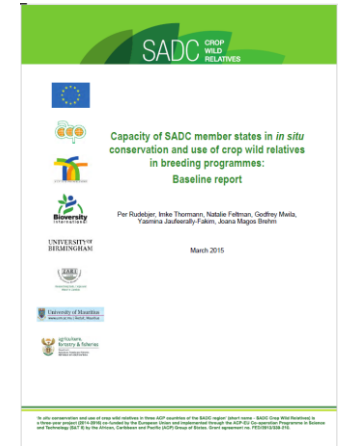
The Crop Wild Relatives Global Portal was created within the framework of the UNEP-GEF supported project "In situ conservation of crop wild relatives through enhanced information management and field application" (2004-2010).

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<http://www.cropwildrelatives.org/>

Capacity building - summary

- Capacity survey
- Regional training workshops
- Interactive toolkit
- Working sessions with partners in the countries



Immediate aim: Support the development of **National Strategic Action Plans (NSAP)** for CWR conservation and use



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- **Develop exemplar National Strategic Action Plans** for the conservation and use of CWR in the face of the challenges of climate change across the SADC region

Development of National Strategic Action Plans (NSAP)

Activity 1

Development of a CWR checklist and identification of priorities for conservation



Activity 2

Identification of regional and national *in situ* CWR hotspots and priority sites for *in situ* conservation and *ex situ* collection



Activity 3.3

Predict which CWR *in situ* populations and materials from *ex situ* collections have traits adapted to extreme climate conditions



Activity 4

Develop National Strategic Action Plans (NSAP) on *in situ* conservation and use of priority CWR

MAURITIUS – CWR checklist

Flora checklist

- Flores des Mascareignes

Crop and wild harvested plant diversity

- Mansfeld's World Database of Agricultural and Horticultural Crops (<http://mansfeld.ipk-gatersleben.de/>)
- Endemic genera that contain cultivated taxa in MU (but absent in the Mansfeld's database)
- Native taxa with direct medicinal, timber and ornamental uses

CWR and wild harvested plants partial checklist – 644 taxa

- Only native taxa
- CWR related to food, forestry, medicinal and ornamental crops
- Wild harvested plants

SOUTH AFRICA – CWR checklist

Flora checklist

- *South African National Plant Checklist* + Red List of South African Plants online database



20,500 native +
8000
introduced

Crop diversity (ALL CROP CATEGORIES)

- Global crops and minor crops potentially important for South Africa and regionally
- *Crop And Crop Genus Lists For National CWR Checklists And Checklist Prioritization* (Kell unpublished):
 - Mansfeld's World Database of Agricultural and Horticultural Crops (<http://mansfeld.ipk-gatersleben.de/>)
 - *Enumeration of cultivated forest plant species* (Schultze-Motel 1966)
 - Community Plant Variety Office (<http://www.cpvo.europa.eu/main/>) (ornamental)
 - *Medicinal and Aromatic Plant Resources of the World* (MAPROW) database (U. Schippmann, Bonn, 2004, personal communication with S. Kell) (medicinals and aromatics)
 - Genera of the Annex 1 of the *International Treaty on Plant Genetic Resources for Food and Agriculture* (FAO 2001)
- *Assessment of activities on underutilised crops* (Williams & Haq 2002)
- World Programme for the Census of Agriculture 2010. Appendix 4: Alphabetical list of crops with botanical name and crop code (FAO 2005)
- Draft list of indigenous and alternative food crops in South Africa (Agricultural Research Council of South Africa)
- Taxa were categorised as: food, fodder and forage, forestry and timber, industrial, medicinal and aromatic, ornamental and unknown
- Broader crop gene pool genera for South Africa extracted from the Harlan and de Wet inventory:
<http://www.cwrdiversity.org/checklist/>

Food and fodder CWR checklist – 1609 taxa

- Both native and introduced taxa

Overview – 3 countries

CWR CHECKLIST

CWR CHECKLIST RESULTS

MAURITIUS

Global crops, endemic taxa with cultivated species.

Human food, forestry, medicinal, ornamental crops + wild harvested plants.

Only native.

644 taxa

SOUTH AFRICA

Global crops, minor crops potentially important for South Africa and regionally.

Human food (incl. beverages), fodder crops.

1609 taxa

ZAMBIA

Global approach (global crops).

National approach (national crops) - crop prioritization.

Cereal, food legumes, vegetable, root and tuber, oil, fibre, pasture and forage and green manure national (native and introduced) crops.

Only native.

3671 and 464 taxa

SOUTH AFRICA – CWR prioritization

Criteria

Socio-economic value (FAOSTAT): 10 year average production value for SADC + average annual contribution to dietary energy per capita per day for Africa + globally important crops for food security (provide $\geq 3\%$ of plant derived dietary energy supply in ≥ 1 sub-regions)

Utilization potential for crop improvement (Harlan and de Wet inventory: <http://www.cwrdiversity.org/checklist/>, GRIN): gene pool and taxon group concepts

IUCN Red List categories and Rarity

Occurrence status: native, naturalized

Relative distribution: endemic to ZA or not

Methodology

1. CWR checklist was annotated with information as per the criteria.
2. Scoring and sum of scores for each taxon.

Priority CWR: score ≥ 11 (out of 26) + all GP1-GP3 taxa that didn't score ≥ 11

Overview – 3 countries

PRIORITIZATION CRITERIA

MAURITIUS

Economic value (10 year average production value at national, regional, global levels)

Utilization potential for crop improvement

Relative distribution

Occurrence status

IUCN Red List categories

SOUTH AFRICA

Economic value (10 year average production value in SADC)

Socio-economic value (average annual contribution to dietary energy per capita per day for Africa + globally important crops for food security)

Utilization potential for crop improvement

Relative distribution

Occurrence status

IUCN Red List categories + Rarity

ZAMBIA

Crop use category

Utilization potential for crop improvement

Relative distribution

IUCN Red List categories

SOUTH AFRICA – priority CWR



49 CWR of sweet potato

15
families

33
genera

292
taxa



32 CWR of millets

253
native

93
endemi
c to ZA

25 CR
26 EN
16 VU



41 CWR of rooibos tea

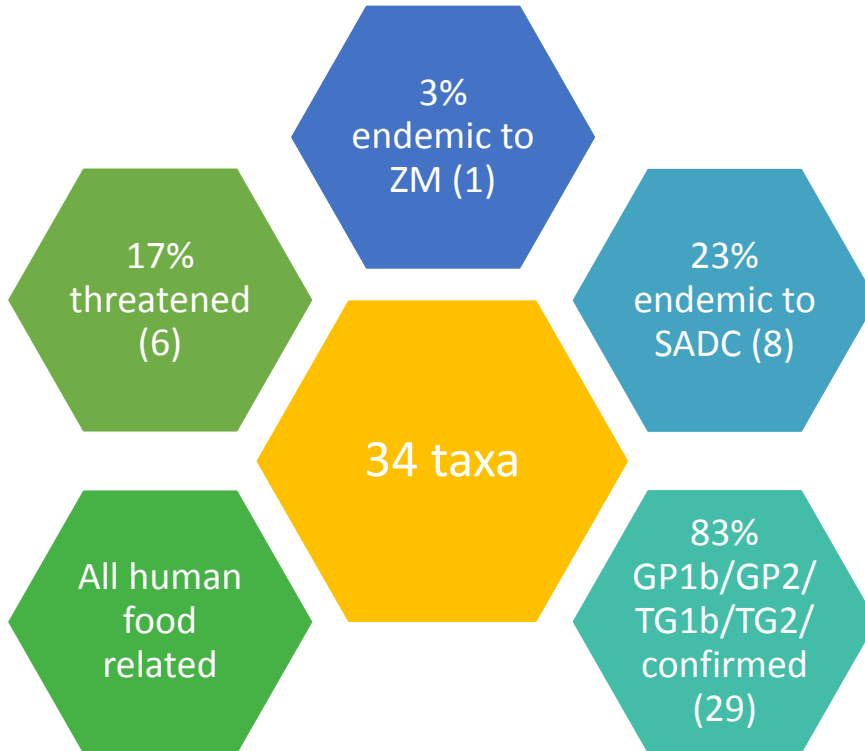


48 CWR of eggplant

ZAMBIA – priority CWR



9 CWR of cowpea



5 CWR of yam



5 CWR of rice



7 CWR of cucumber/melon

Overview – 3 countries

PRIORITIZATION METHOD

PRIORITY CWR

PRIORITY CWR RELATED CROPS

MAURITIUS

CWR related to food crops prioritized.

Scoring and sum of scores used to further prioritize CWR related to food crops.

Top 10 in each Mauritius and Rodrigues.

10 + 3 in Mauritius
10 in Rodrigues

MAURITIUS: coffee (*Coffea*), olive (*Olea*), fig (*Ficus*), Indian olive (*Elaeocarpus*), fonio (*Digitaria*)

RODRIGUES: *Aloe*, millets (*Digitaria*, *Panicum*), *Asparagus*, sweet potato (*Ipomoea*), olive (*Olea*), fig (*Ficus*)

SOUTH AFRICA

Scoring and sum of scores.

Score ≥ 11 (out of 26)
+ all GP1-GP3 taxa that didn't score ≥ 11

292 taxa

Sweet potato (*Ipomoea*), eggplant (*Solanum*), rooibos tea (*Aspalathus*), millets (*Digitaria*, *Echinochloa*, *Eleusine*, *Panicum*, *Paspalum*, *Setaria*), cucumber/gherkin and melon (*Cucumis*), yam (*Dioscorea*), etc

ZAMBIA

Scoring and sum of scores.

CWR grouped according to range of scores (high, medium, low)

34 taxa

Cowpea (*Vigna*), yam (*Dioscorea*), rice (*Oryza*), *Sorghum*, cucumber/melon (*Cucumis*), millet (*Eleusine*), sweet potato (*Ipomoea*), Pearl millet (*Pennisetum*), eggplant (*Solanum*)

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WHICH SPECIES ARE PRIORITIES FOR REGIONAL CONSERVATION ACTION?



- More than 1900 CWR species occur in the region
- Which species are the highest priorities for conservation action?
 - Species related to crops important for food and economic security
 - Species with greatest potential for utilization in crop improvement programmes

WHICH SPECIES ARE PRIORITIES FOR REGIONAL CONSERVATION ACTION? cont'd

60 food/beverage crops/crop groups reported by FAO in the SADC region

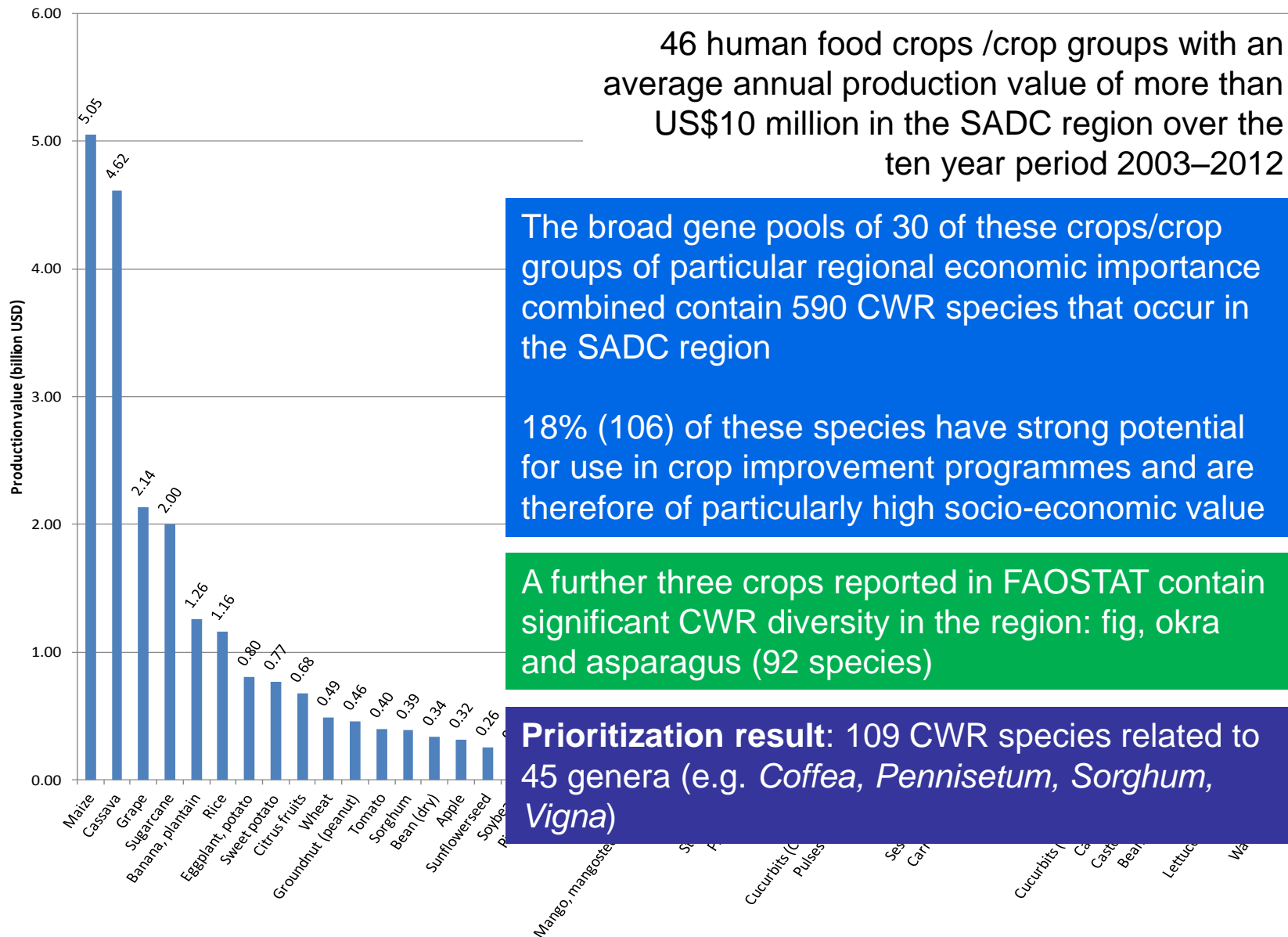
34 food/beverage crops in the SPGRC base collection

27 other cultivated food or beverage species in the SPGRC database

In total, 91 food/beverage crops/crop groups cultivated in the region

731 CWR species related to 75 of these crops/crop groups occur in the SADC region

WHICH SPECIES ARE PRIORITIES FOR REGIONAL CONSERVATION ACTION? cont'd



Data source: FAO (2014)

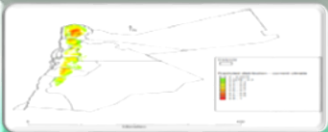
Diversity and hotspot analysis



Diversity analysis (hotspot, complementarity, ecogeographic, combination of both)



In situ and *ex situ* gap analyses



Climate change analysis



Conservation recommendations



Validate identified sites through expert interviews and field visits to verify spatial extensions of populations, threats and occurrences

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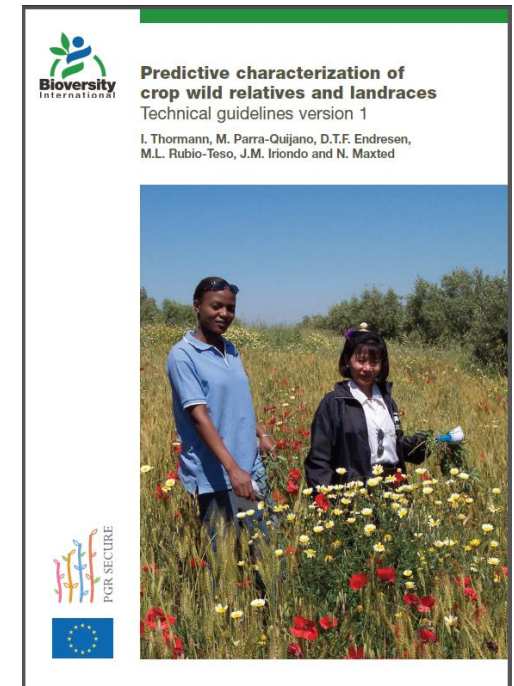
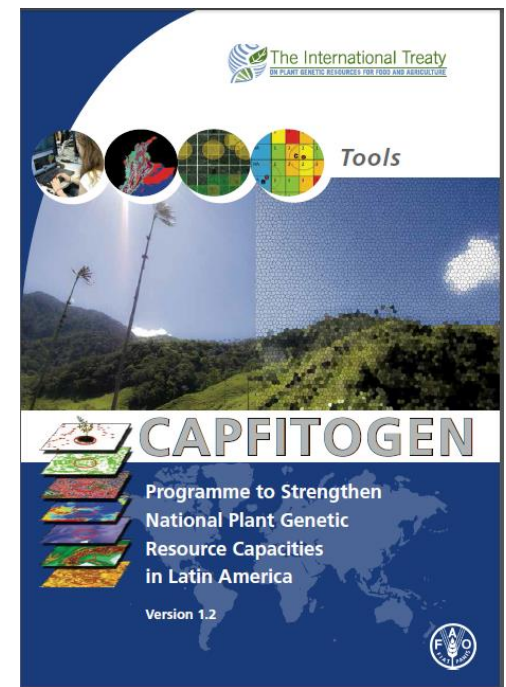


Activity 4

Develop National Strategic Action Plans (NSAP) on *in situ* conservation and use of priority CWR

Predictive characterization

- Potential crops: rice in Zambia, *Vigna* and sorghum in South Africa, coffee in Mauritius
- uses geographical and environmental data along with Geographic Information Systems (GIS) analysis to identify plant populations that are likely to have specific characteristics, e.g. drought tolerance



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THE CWR NSAP CONCEPT: purpose

- Raise awareness of the value of national CWR diversity for food and economic security, particularly for adapting crops to the impacts of climate change
- Define the specific actions and resources required to effectively conserve and sustainably utilize national CWR diversity
- Provide a framework and roadmap for long-term conservation and sustainable use of CWR
- Contribute to regional and global efforts in CWR conservation and sustainable use



THE CWR NSAP CONCEPT: elements



THE CWR NSAP: documentation



TEMPLATE FOR THE PREPARATION OF A **NATIONAL STRATEGIC ACTION PLAN** FOR THE CONSERVATION AND SUSTAINABLE USE OF CROP WILD RELATIVES

Ehsan Dulloo, Joana Magos Brehm, Shelagh Kell, Imke Thormann and Nigel Maxted

Bioversity International
and
University of Birmingham



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TEMPLATE FOR THE **TECHNICAL BACKGROUND DOCUMENT** OF A NATIONAL STRATEGIC ACTION PLAN FOR THE CONSERVATION AND SUSTAINABLE USE OF CROP WILD RELATIVES

Joana Magos Brehm, Shelagh Kell, Imke Thormann, Nigel Maxted and Ehsan Dulloo

University of Birmingham
and
Bioversity International



UNIVERSITY OF
BIRMINGHAM

THE CWR NSAP: documentation

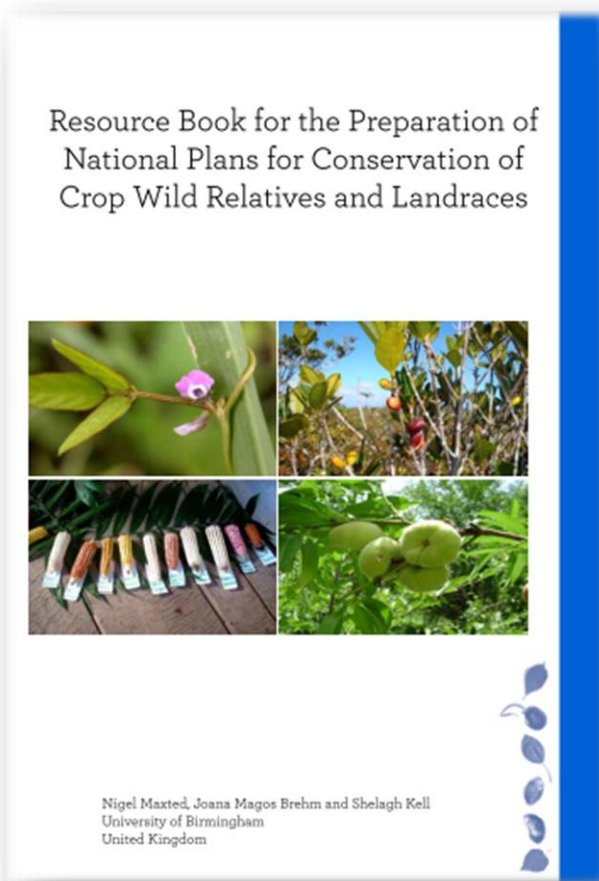
Technical background document

NSAP

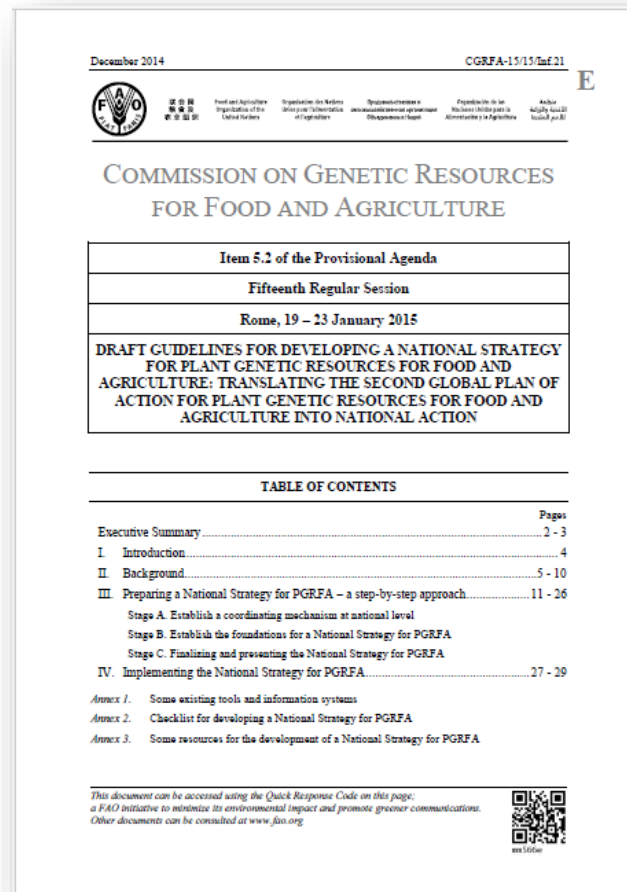
6	Conservation status of CWR diversity
6.1	National CWR diversity
6.2	Current status of <i>in situ</i> conservation of CWR.....
6.3	Current status of <i>ex situ</i> conservation of CWR.....
6.4	Threat assessment.....
6.5	Predicted impact of climate change
6.6	Conservation needs
6.6.1	<i>In situ</i> conservation
6.6.2	<i>Ex situ</i> conservation.....

1	National CWR checklist
1.1	Type of CWR checklist.....
1.2	Data sources to produce the CWR checklist
1.2.1	National flora checklist
1.2.2	List of crops or crop genera
1.3	Generation of the national CWR checklist.....
1.4	Information documentation
1.5	CWR checklist and overview
2	Prioritizing the CWR checklist
2.1	Prioritization criteria
2.2	Prioritization method.....
2.3	Priority taxa.....
2.4	Compilation of the CWR inventory for priority taxa
2.5	Information documentation
3	Diversity analysis of priority CWR
3.1	Distribution, hotspots and complementarity analyses
3.2	Ecogeographic diversity analysis.....
3.3	Genetic diversity analysis.....
3.4	Information documentation
4	Gap analysis of priority CWR.....
4.1	<i>In situ</i> gap analysis
4.2	<i>Ex situ</i> gap analysis.....
5	Climate change analysis.....

CWR NSAP AND THE TECHNICAL BACKGROUND DOCUMENT - SOURCES



http://www.fao.org/fileadmin/templates/agphome/documents/PGR/PubPGR/ResourceBook/TEXT_ALL_2511.pdf



<http://www.fao.org/3/a-mm566e.pdf>

Steps towards the development

First national stakeholder workshop in each country



Roadmap in Zambia

DATE	ACTIVITY	RESPONSIBILITY
7 August 2015 – 28 April 2016	Development of the first draft of the NSAP	Consultant
30 April 2016	Submission of the first draft of the NSAP to ZARI	Consultant
16 May 2016	The submitted first draft of the NSAP availed to Bioversity International and University of Birmingham	ZARI
31 May 2016	Feedback on the first draft NSAP made available to ZARI	Bioversity International, UoB,
15 June 2016	Feedback on the draft NSAP made available to the Consultant	ZARI
30 June 2016	Submission of the second draft to ZARI	Consultant
5 July 2016	Circulation of the second draft to stakeholders	ZARI
22 July 2016	Draft NSAP discussed and provide feedback during National stakeholders' workshop	National Stakeholders
22 August 2016	Incorporation of feedback from national stakeholders' workshop and suggestions made by ZARI,	Consultant
10 September 2016	Submission of the revised and finalized NSAP to ZARI	Consultant
3 October 2016	Share the finalized NSAP with Bioversity and UoB	ZARI
13 October 2016	Endorsement or validation of the document by stakeholders	National stakeholders
	Submission of Endorsed or validated final document to Permanent secretary	ZARI Director
	Launch of NSAP	ZARI

Facilitate the mainstreaming of CWR NSAP into national and regional policies

South Africa: specific target for *in situ* and *ex situ* conservation of priority CWR in the South African national action plan for implementation of target 9 of the GSPC

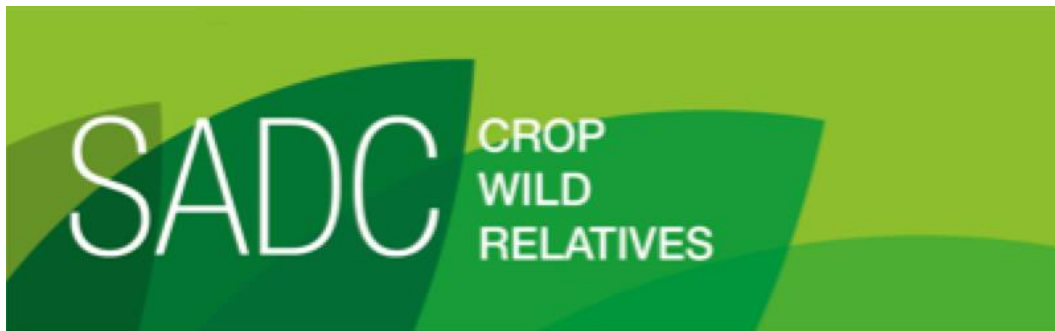
Zambia : revision of the National Biodiversity Strategic Action Plan (NBSAP); National Agriculture Policy

Mauritius : links established to NBSAP; support from Ministry of AgroIndustry and Food security;

SADC regional level: support from SPGRC and SADC Secretariat

Final notes

- Basis for working towards an integrated regional strategy for CWR conservation in the SADC region
- Creation of a regional collaborative CWR network is being discussed
- Final scientific conference in 2017 on CWR conservation and use
- Project approach can be implemented in other countries





Thank you



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