

UNIVERSITY OF
BIRMINGHAM



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Creating a national inventory of CWR

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Joana Magos Brehm, Shelagh Kell and Nigel Maxted

SADC Crop Wild Relatives

In situ conservation of CWR and diversity assessment techniques

Regional training workshop. 10-13 November 2014, Mauritius

Checklist *versus* inventory

Group	Family	Genus	Sp. Name	Sp. Author
DICOTYLEDONS	Leguminosae	Trifolium	sparganum	Ball, ex Lovell
DICOTYLEDONS	Leguminosae	Trifolium	oboccurum	Savi
DICOTYLEDONS	Leguminosae	Trifolium	occidentale	Coombes
DICOTYLEDONS	Leguminosae	Trifolium	pratense	L.
DICOTYLEDONS	Leguminosae	Trifolium	nigrescens	Viv.
DICOTYLEDONS	Leguminosae	Trifolium	montanum	Viv.
DICOTYLEDONS	Leguminosae	Trifolium	ochrolepis	Huds.
DICOTYLEDONS	Leguminosae	Trifolium	medium	L.
DICOTYLEDONS	Leguminosae	Trifolium	pratense	L.
DICOTYLEDONS	Leguminosae	Trifolium	leucanthum	M. Bieb.
DICOTYLEDONS	Leguminosae	Trifolium	lappaceum	L.
DICOTYLEDONS	Leguminosae	Trifolium	littorale	Bret.
DICOTYLEDONS	Leguminosae	Trifolium	hybridum	L.
DICOTYLEDONS	Leguminosae	Trifolium	herbium	AIL.
DICOTYLEDONS	Leguminosae	Trifolium	medicatum	Savi
DICOTYLEDONS	Leguminosae	Trifolium	subterraneum	L.
DICOTYLEDONS	Leguminosae	Trifolium	repens	L.
DICOTYLEDONS	Leguminosae	Trifolium	phloides	Poir., ex Willd.
DICOTYLEDONS	Leguminosae	Trifolium	glomeratum	L.
DICOTYLEDONS	Leguminosae	Trifolium	repens	L.
DICOTYLEDONS	Leguminosae	Trifolium	spumosum	L.
DICOTYLEDONS	Leguminosae	Trifolium	montanum	L.
DICOTYLEDONS	Leguminosae	Trifolium	hybridum	Géard ex Lobel
DICOTYLEDONS	Leguminosae	Trifolium	subterraneum	L.
DICOTYLEDONS	Leguminosae	Trifolium	spumosum	L.

CWR checklist

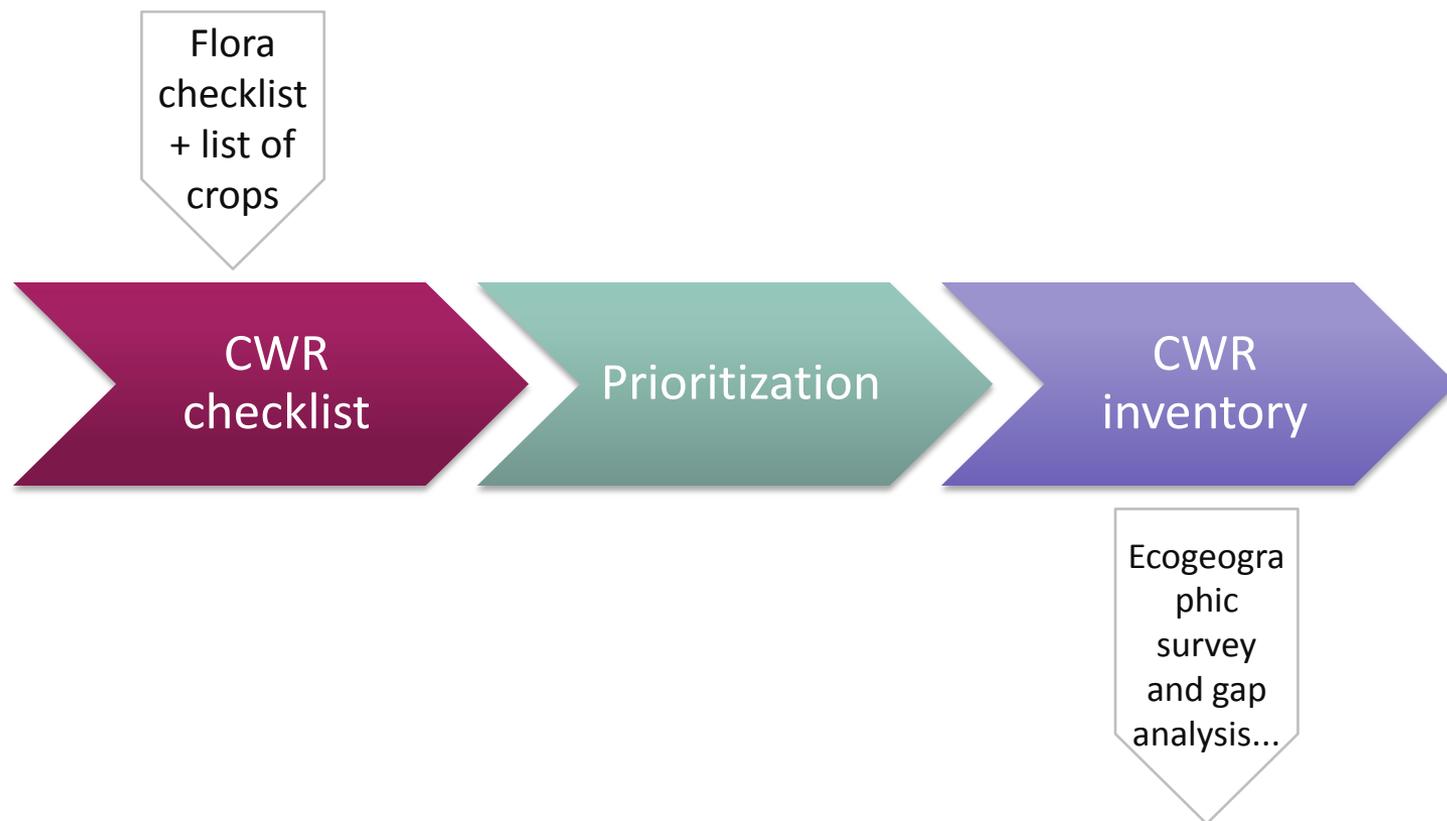
- list of CWR taxa



CWR inventory

- list of CWR taxa + extra information

Checklist *versus* inventory



Checklist *versus* inventory

FAO Resource Book (pp 74-96)

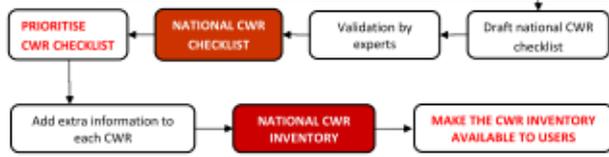
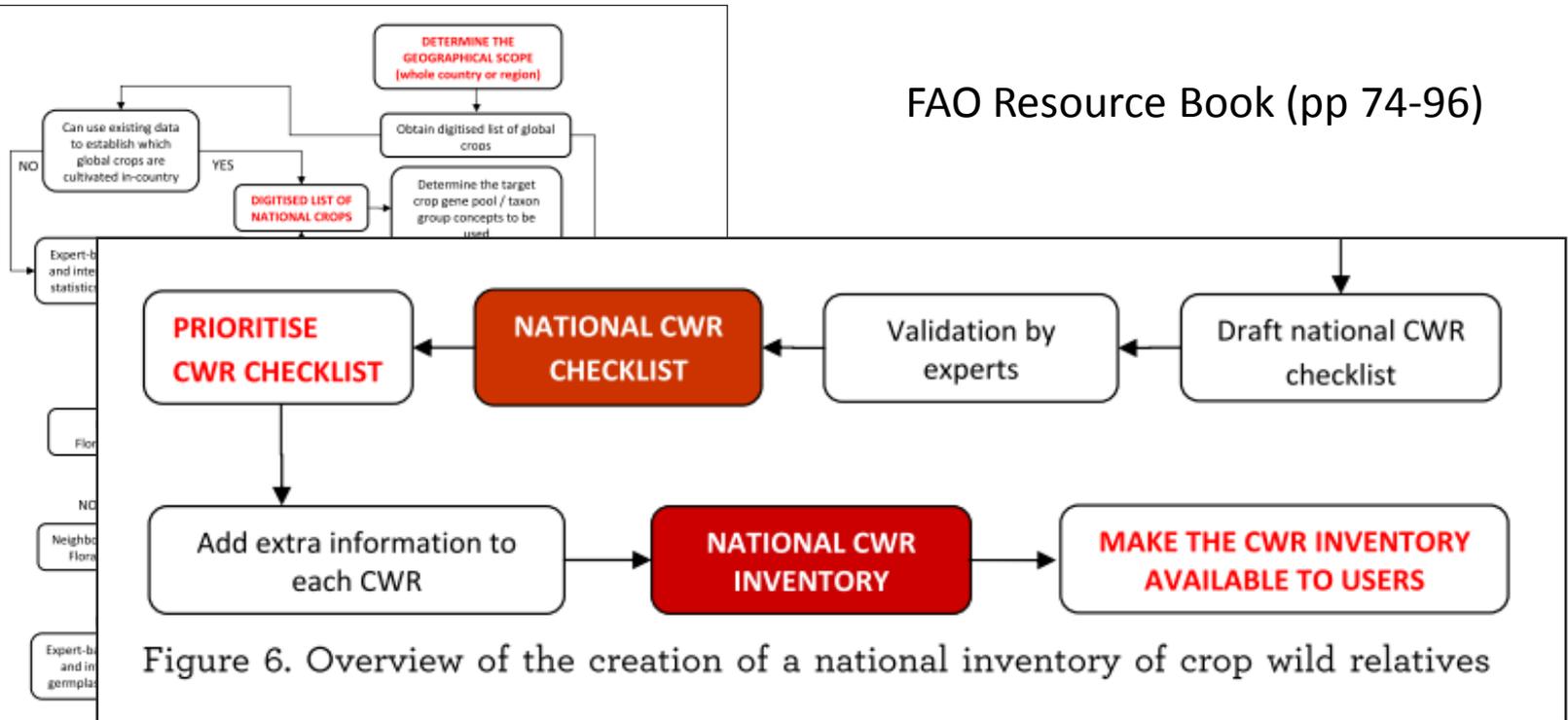


Figure 6. Overview of the creation of a national inventory of crop wild relatives

National inventory – descriptors

**STANDARD FOR WEB-ENABLED CWR
CONSERVATION DATA for**
*National Checklists, National Inventories
and Conservation Strategies, v1*

Séainé Díaz, Nigel Maxted, José Iriarte, Shalagh Kelly, Deji Fitzgerald, Hannah Fielder, Mohamed Ehsan Dullou, Iain Thornton, Adriana Alexia and Milica Sklaric



Biodiversity International
UNIVERSITY OF BIRMINGHAM
Universidad Rey Juan Carlos
MTT
EUROPEAN UNION
PGR SECURE

NOMENCLATURE

GENEPOOL or
TAXON GROUP
CONCEPT

CURRENT
CONSERVATION
ACTIONS

LEGISLATION

BIOLOGY

CROSSABILITY
WITH CROP

THREATENED and
TAXON STATUS,
and DISTRIBUTION

IN SITU
POPULATIONS

SITE
INFORMATION

Sources of information

NOMENCLATURE

- (also in checklist)
- GRIN taxonomy for plants (<http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl>)
- The Plant List (<http://www.theplantlist.org/>)
- National floras / checklists...

GENEPOOL or TAXON GROUP CONCEPT

- (also in checklist)
- Harlan and de Wet inventory: <http://www.cwrdiversity.org/checklist/>
- GRIN taxonomy database on CWR: <http://www.ars-grin.gov/~sbmljw/cgi-bin/taxcwr.pl>

CURRENT CONSERVATION ACTIONS

- *in situ* conservation survey
- national and international genebanks

Sources of information

LEGISLATION

- national legislation
- international legislation (e.g. CITES)

BIOLOGY

- books
- scientific papers
- experts
- Seed Information System (<http://data.kew.org/sid/plantform.html>)

CROSSABILITY WITH CROP

- scientific papers
- breeding experts...

Sources of information

THREATENED and TAXON STATUS, and DISTRIBUTION

- (also in checklist)
- National Red Lists (IUCN criteria and /other)
- Global assessments - IUCN (www.iucn.org)
- GRIN taxonomy for plants (<http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl>)

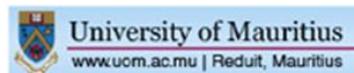
IN SITU POPULATIONS

- field data (survey and monitoring)
- national and international genebanks (*ex situ* survey)

SITE INFORMATION

- field data (adm, GPS, land use, habitat, soil, legislation...)
- climate data (<http://www.worldclim.org/>)
- soil data - HWS Database: <http://webarchive.iiasa.ac.at/Research/LUC/External-World-soil-database/>

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