



Documenting best germplasm management practices

**GPG2/GCP Quality Management and Performance
Measurement System design workshop**

16-19 October 2007, Lunteren, The Netherlands

- How to agree them?
- How to share them?



Collective Action for the Rehabilitation of Global Public Goods in the CGIAR Genetic Resources System: Phase 2

Activity 2.1 Consolidate, refine, disseminate and promote best management practices for collections, including germplasm health in storage

- Sub-activity 2.1.1: Compile, review and update **standard operating procedures**.
- Sub activity 2.1.3: Develop and promote a readily-accessible knowledge base on **best practices in genebank management**

2.1.1. Compile, review and update standard operating procedures

Year 1

- Existing genebank manuals and management practices **gathered and collated**
- Workshop held to **analyze and identify best practices** for germplasm management of target **vegetatively propagated crops**

Year 2

- Workshop held to **analyze and identify best practices** for germplasm management of target **seed crops**
- **Application of ISO standards** to genebank management assessed
- **Guidelines produced** on best practices and management for target crops
- **Centres respond** to best practice analysis and adjust work plans accordingly

2.1.3. Develop and promote a readily-accessible knowledge base on best practices in genebank management.

Year 1

- **Compilation** of training materials on genebank management
- **Conceptualisation** of knowledge base

Year 2

- Knowledge base **framework infrastructure established**
- **Knowledge base populated** with best practices for target crops and other information materials

Year 3

- Knowledge base **converted into training tool**
- **Training of trainers** in use of knowledge base and promotion of best practices



Target Crops:

barley, maize, rice, wheat

cassava, *Musa*,

chickpea, forages

- Why the 8 crops?
- CGIAR
- Other partners
- (Other crops)

Collect data

Verify and fill gaps

Incorporate into knowledge base

Activity coordinator and contact information:

Ehsan Dulloo (Bioversity International)

Collaborators 2.1.1:

Task Group:

Jean Hanson (ILRI) (*forages, grasses*)

Ken Street /Ahmed Amri (ICARDA) (*barley, chickpea, wheat, forage*)

Ruaraidh Sackville Hamilton (IRRI) (*rice*)

Dominique Dumet (IITA) (*cassava, maize*)

Main Collaborators:

Tom Payne, Monica Mezalama, Suketoshi Taba (CIMMYT) (*wheat (& maize)*)

Hari Upadhyaya (ICRISAT) (*chickpea*)

Ines Sanchez (WARDA) (*rice*)

Daniel Debouck (CIAT) (*cassava*)

Ines Van den Houwe (Bioversity) (*Musa*)

Cecilia Ynouye, Ian Barker (CIP)

Melinda Smale (IFPRI)

Ramni Jamnadass (ICRAF)

John Fitzsimon (IAU)

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Collaborators 2.1.3:

Task Group:

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Ines Sanchez (WARDA)

Daniel Debouck (CIAT)

Jamie Watts (ILAC)

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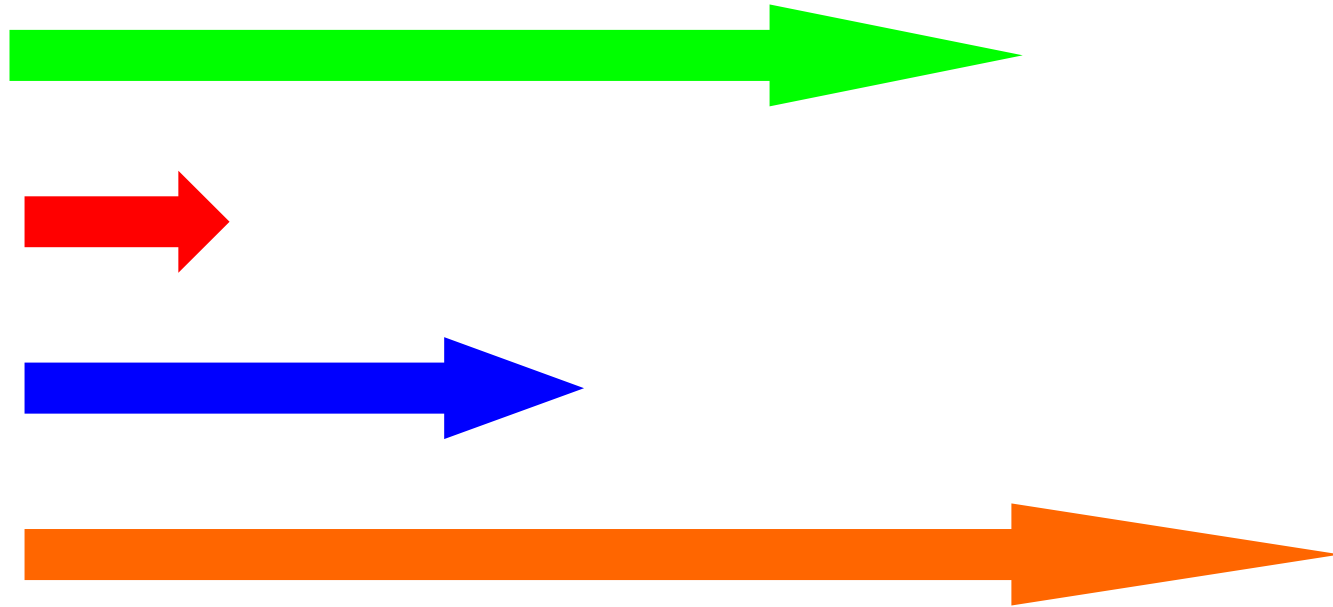
Other similar approaches:

<http://www.synthesys.info/index.htm>

“**SYNTHESYS is setting standards for collection management** and databases, and aims to raise scientists’ **awareness of best practice** by offering improved training and workshop opportunities, and **guidelines for the care, storage and conservation of collections**. The Project will also provide new policies on emerging technologies for storing collections, such as DNA samples or tissue banks. (European museums)



**Links with other activities
(outputs, web tools, surveys) ...**



- 1.1 Uniform **risk management** procedures developed and implemented
- 2.4 Develop and disseminate decision support tools to enhance the **cost effectiveness** of collection management
 - 1.4.1 Establish principles and strategy for **safety backup** of collections
- 1.2 Refinement and standardization of **storage procedures** for clonal crops
 - 2.1.2 Develop crop specific guidelines to maintain **germplasm free from transgenes**
- 3.1 Development of a collaborative platform in support of best practices in **safe movement of germplasm**
- 4.2.1 Review of **characterization** standards and strategies

Needs assessment:

- 6.3.2 Development of a plan for providing training to NARS
- 6.4.2 Development and implementation of a performance measuring system



What are best practices?

- **Method more effective at delivering an outcome than another method**
- **Most efficient and effective way of accomplishing a task**
- **Desired outcome can be achieved with fewer problems**



Best practices vs **standards**

- **Dynamic**
 - **Options**
 - **Aim for improvement**
- **Rigid and static**
 - **Only one best way**
 - **Fixed without improvement**

Both:

Assure quality results

Assure consistency in tasks

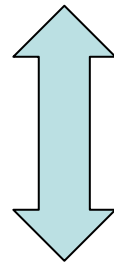
Risk management and mitigation



- How to collect information?
- What type of information?
- What specific procedures?
- Which detail?



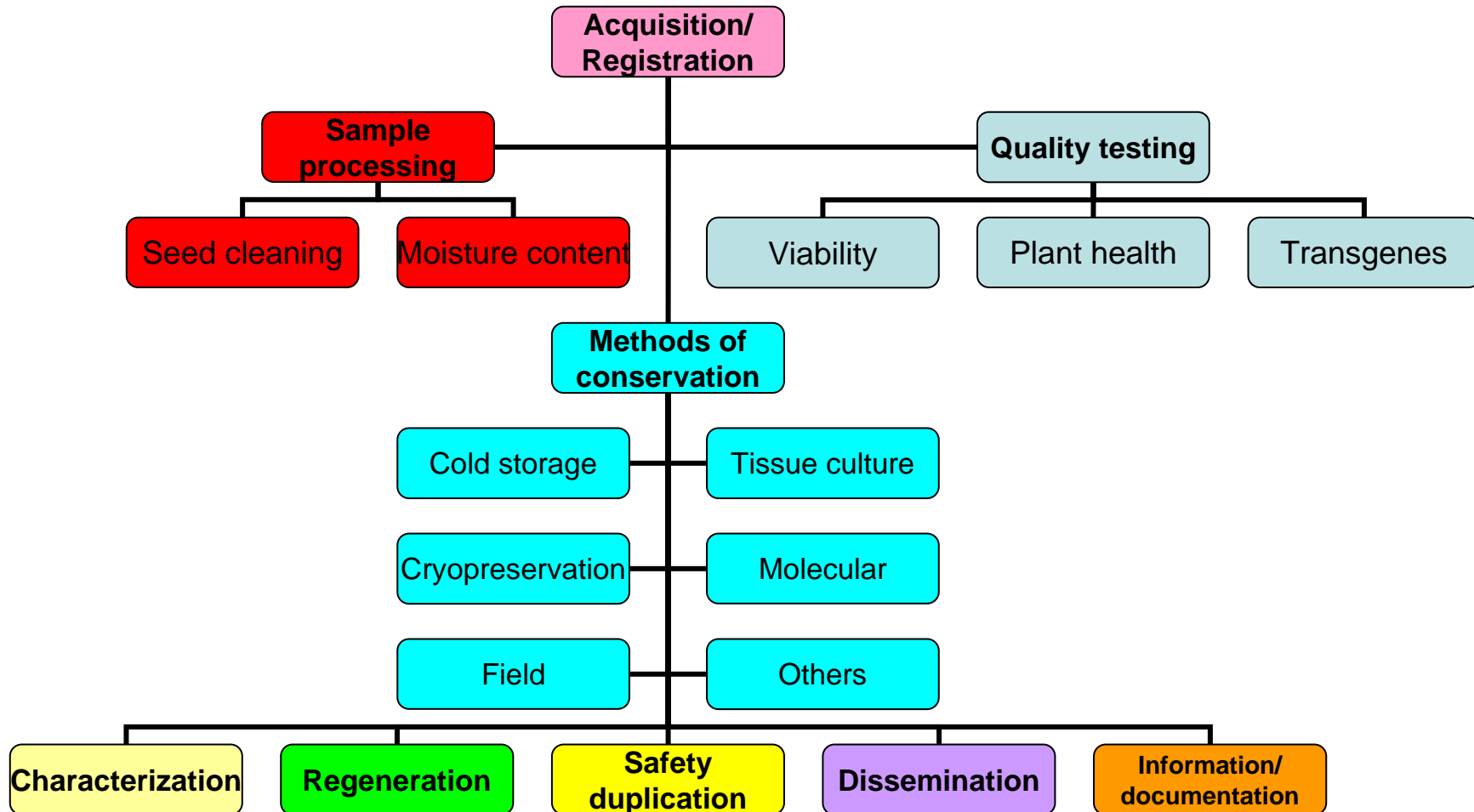
Layout structure



Technical content

- Main links with other activities within GPG2
- Main links with genebanks within the GPG2 and outside the CGIAR

- The design of the structure (so far)





Plan - do - check - act

-The testing at workshops

Appeal for collaboration/cooperation

Have inputs from potential users (genebank curators/managers)

What do you need?

How do you want to navigate?

What kind of information do you need? At what level?

- The update/changes expected from other genebanks, individual comments, other institutions/partners