Capturing IPGRI's Public Goods:

Identifying Useful Knowledge and Innovations and Ensuring a Broad Distribution

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Outline

1. **Description of project:**
   a. Problem
   b. Purpose
   c. Method
   d. An aside : Definition of Public Goods
2. **Results**
3. **Recommendations**

Problem

- ***Are all public goods (useful knowledge and products) generated by IPGRI staff during a project available to all potential users ?***

1. **Important to make the identification (description) of such Public Goods (PGs) more efficient in order to make them broadly available!**

→ No common 'PG database' on institutional level (within IPGRI)

→ Ideally PG generated by projects could be gleaned from project documentation

Problem cont.

- ***Are all public goods (useful knowledge and products) generated by IPGRI staff during a project available to all potential users ?***

2. Level of scientists' awareness of the importance of all intellectual assets they produce!

→ 'less tangible ' products such as an improved method of doing something.

(e.g. new method of distributing germplasm)

improved access ⇨ more efficiency ⇨ more impact

Benefits of improved identification of PGs:

- Avoid "reinventing - the - wheel"
- Better distribution to user
- Could lead to an increased use

→ Contribute to IPGRI's mission and impact!

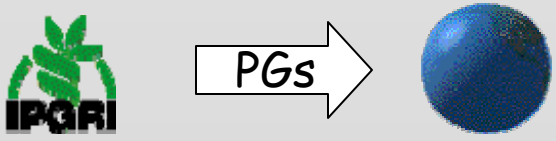
Purpose of the project:

- **Identify useful knowledge and products (*Public Goods*) resulting from IPGRI projects**

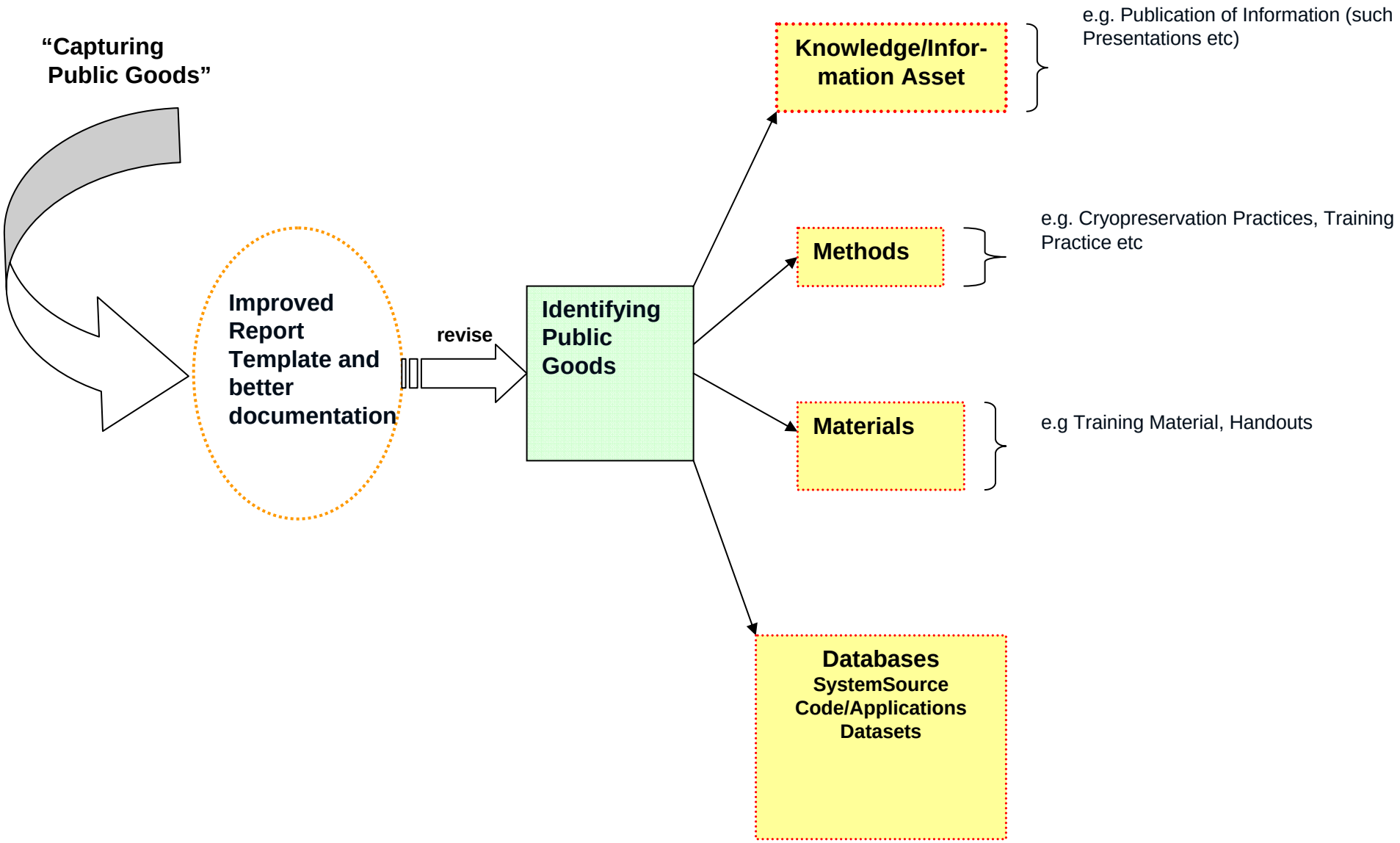
➔ Are they accessible?

➔ Can they be distributed in legal terms to other potential users (with regards to who holds rights or third party resources used which requires licensing)?

⟶ How can potential constraints be overcome?



Graph describing the project:



Method

- **Assumption**: available information regarding specific useful knowledge and products generated by IPGRI staff can be gleaned from project documents.

Method

1. Evaluated existing IPGRI's project documentation

   (such as proposals and annual reports etc.)

Method

☞ **2.** Prepared specific questionnaires for activity managers and involved scientists on the base of evaluated documents

Main questions:

- improved methods or technologies developed? or standards used?
- who else could use it?
- availability/distribution?
- IP/legal issues?

PG Identification Form sent to scientists to obtain additional information about produced PGs

Public Good Identification Form

1.Description of technology and suggested scope

Name of asset:	***Developmental Stage of this Technology*** (How user-friendly is this asset/public good, at the present time. Is it at a stage where a user could use it without having to experiment or change too much or is it just an untested idea or does it need some further testing before you would give it to someone else to use)**:**

2. What is the problem you are trying to address?

3. What is your solution to this problem? a) the conceptual idea of the invention; **b)** how to make and use the invention; **c)** specific examples, if appropriate; and **d)** drawings or diagrams that would help in understanding the invention)

4. Who would be intended users of this asset?

5. Novel Features: What is the date when the basis of this asset was first conceived?

6. Records of Verification:

7. Project Inputs and Sources used (please provide links to funding agreements such as Nr of LOA):

8. 3rd Party Inputs and Sources Used (such as other peoples software, technologies -have you used anything that would mean that the product cannot be distributed?)**:**

9. Public disclosure of your asset / availability (how was it distributed and where/whether it is publicly available):

What are Public Goods???

- Definition by economics:

  A **public good** is a good that is hard or even impossible to produce for private profit, because the market fails to account for its large beneficial externalities → no profits in producing PGs!

→ CGIARs products are PGs! Not interested in profits!

What are Public Goods??? Cont.

By definition, public goods possess two properties:

- ***Non-rivalious***—its benefits fail to exhibit consumption scarcity; once it has been produced, everyone can benefit from it without diminishing other's enjoyment.

- ***Non-excludable***—once it has been created, it is very difficult to impossible to prevent access to the good.

Public Goods:

Classification of PGs:
WHO benefits?

- Local PGs
- National PGs
- Regional PGs
- *Global* PGs

- IPGRI PGs

(a little bit of everything)

'Sub categories'

- *'Aggregated'* **PGs:**

- A Global PG aggregates e.g Local and/or Regional PGs (e.g: IPGRIs Online Catalogue)

- *'Impure' PGs:*

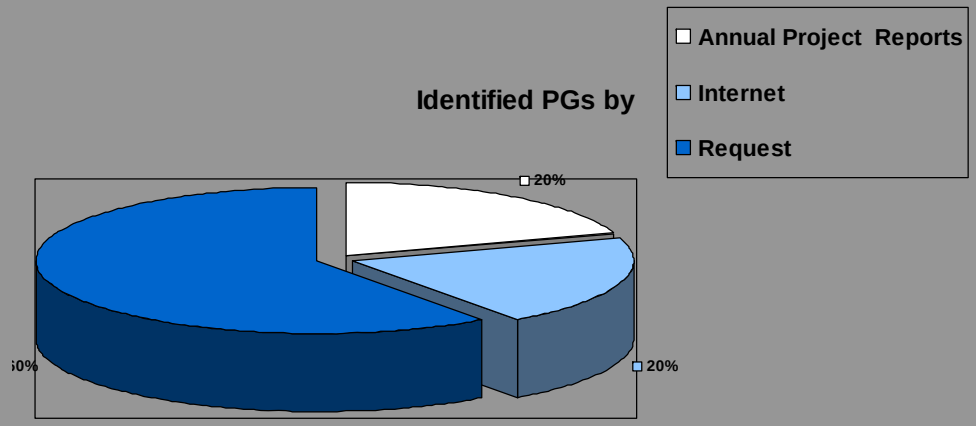
- Depending on the degree of non-excludability and non-rivalry (e.g.: When partners hold rights and hence distribution is constrained !)

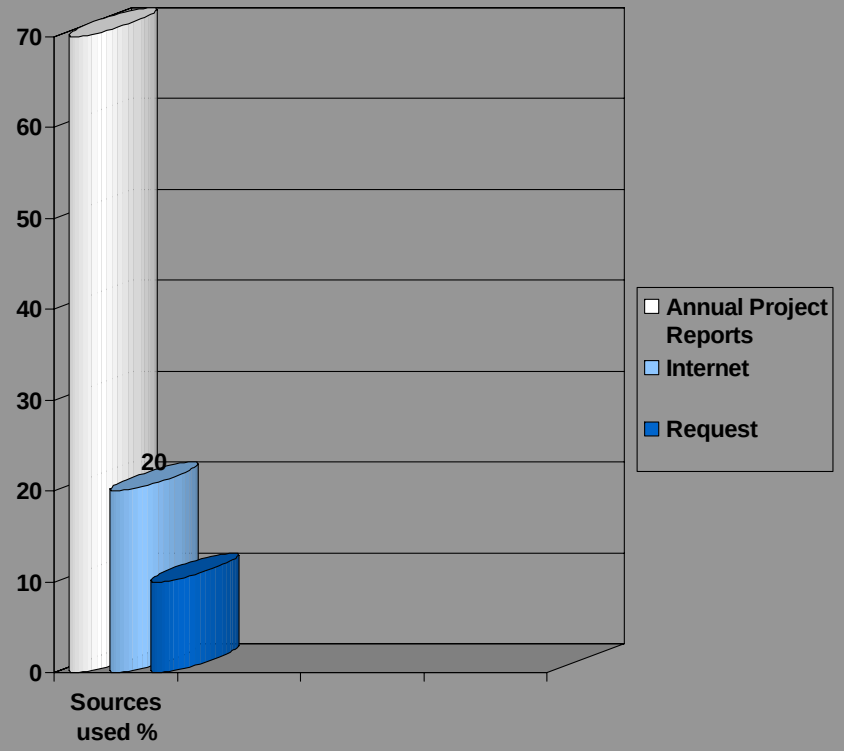
Public Good

In general the question, regarding the project, is if there emerged any new or improved procedures or products during the project development process , which could potentially be <u>useful for others</u> !

- → CGIAR produces Public Goods!
- Not interested in profits for ourselves!

Resources used and identified PGs





- **Please note that those graphs are a very simplified illustration**

Results

- *More PGs found through interviews!*
- Matter of subject
- Matter of scientists time to answer
- Matter of definition of PGs

Even though utility might vary greatly, there is more out there which could be delivered to more potential users!

Not necessarily a matter of insufficient report templates!!

- Awareness?
- Interest?
- Incentives?

Recommendations that could be incorporated in reporting documents to obtain additional PGs in the future:

1. Categories of outputs such as:

- **Materials** (e.g. climbing bean lines with heat tolerance)
- **Practices** (e.g. improved cryopreservation)
- **Policy Strategies** (e.g. policy options to build adaptive capacity)
- **Other Knowledge** (e.g. electronic data base on Musa germplasm)
- **Capacity** (e.g. Training for partner scientists)

Recommendations that could be incorporated in reporting documents to obtain additional PGs in the future cont.:

→Provide more details about motivation for the produced product for a better identification of purpose

→Description!

→ Try to develop standard categories which are consistent with the CG or other 'rules'!

Recommendation to obtain additional info from future documents cont.:

2. Information about distribution /technology transfer

- **How** the product was, or will be distributed
- To **whom** it will be, or was distributed
  (intended users/categories of users)
- **Where** the information/product is available
  (e.g. web page etc)

Recommendation to obtain additional info from future documents cont.:

3. Information about IP/legal issues

- such as third party inputs used which could constrain a free distribution/use!!

Recommendation to obtain more complete description of PGs that are publications in the Annual Project Reports
(based on the Bioinformatics web page):

Publications in 2004:

. ***Refereed articles:***

"DArT for High Through-put Genotyping of Cassava (*Manihot Esculenta*) and its Wild Relatives. Ling et al. Theoretical and Applied Genetics "

Motivation: Description of the development of a DArT array for molecular characterization of cassava germplasm.

Results: This is the first time that a DNA array for molecular characterization is developed for a minor crop. If its use proves efficient, it would represent an important option to study the genetic diversity of minor crops, for which genomic resources do not exist and research funding is scarce..

Intended users: Cassava geneticists, curators and breeders. Other scientists working with minor crops and with an interest in molecular characterization of germplasm.

Availability: Since it was published in TAG, availability is either by access to the journal or upon request to the authors.

Contact: Full electronic mail address to be given.

Distribution information: N/A

Thank you!