#### How can we serve you?

### How can genebanks improve their service to users?

#### Discussion Group 4

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Plus 14 Group Members

#### Who are the users?

- Breeders (Need germplasm + detailed data + pre-bred material)
- Researchers
  - Geneticists
  - Experimental biologists (Need biologically defined material –identified + provenance)
- Farmers, Farmers' organizations
  - Genebanks need feedback from recipients
  - Not all genebanks accommodate requests from farmers or other private users
- Policy makers
  - Information provided by genebanks, particularly in relation to conference / treaty obligations and strategic planning)

#### Which services ? (1)

- □ Germplasm conservation and distribution
  - Targeted collecting to meet user needs and fill 'gaps'
  - MTA to meet conference / treaty obligations
- Information generation, management and dissemination
  - Material
    - Passport data, Characterization- Evaluation
    - Pest and disease resistance, Molecular data
    - Original population characteristics
  - Curatorial information
    - How have accessions been managed?
      - Example: a heterozygous landrace population can be conserved as it is or split into several homozygous lines
      - Whether original or regenerated material
  - Ideally users need standardization of the way information is accessible/provided by genebanks, one SMTA for Annex 1 and non-Annex 1 material.

#### Which services ? (2)

- Links to in situ/on-farm conservation to provide safety backup for in situ conserved material
- Training
  - Conservation: NGOs, farmers' organization, associations, other genebanks (e.g. developing countries)
  - Characterisation and evaluation
  - Pre-breeding: possibly linked to private companies
- Repatriation of germplasm and associated information to original provenance sources
- Research
  - Generate knowledge and enhance methodologies

#### Which services (3)

- Communication
  - Develop public awareness on the role and services of PGR and genebanks as most genebanks are publically funded e.g. TV, radio, community shows, papers, etc.
  - Self-promotion service
    - □ Display germplasm diversity plots to make them visible to breeders and other user groups
    - Demonstrate to funding agencies that PGR from genebanks are used and result in an economic impact
  - Communication targets and means
    - ☐ General public, schools
    - Politicians
    - Media
    - ☐ Teachers: Attractive pedagogical tools/materials
    - Use contemporary media (web sites, blogs, Facebook, tweeting etc.)

### Policies and regulations: CBD, ITPGRFA

- □ Some positive and negative feedback thus far
- ☐ But generally perceived that it has resulted in increased:
  - Bureaucracy, need for lawyers
  - □ Difficulties and delays in getting germplasm
  - Difficult to know what the rules are in each country, who the focal points are, because regulations are applied differently in different countries
  - □ 'Users are not lawyers'
  - People do not fully understand what they are signing and fear if they sign they may do wrong
  - Standardization : one SMTA for Annex 1 and non-Annex 1 material
- Resulting in a variable impact on PGR access and distribution
- However, the system may 'bed down' more easily with time?
- □ Recognised that there is moral argument for ABS that cannot be ignored: not discussed

## Nature of services: what genebanks should do more

- Genebanks may wish to do more but with limited resources
  - What should they do less of?
  - There is no one answer as many individual genebanks have specific expertise and therefore requirements
- Assuming could do more then the additional activities were tested using a voting system of 3 votes per group member, see following slide for topics and votes:

## Nature of services: what genebanks should do more

Votes	Additional Topics
13	<ul> <li>Collecting more targeted material</li> </ul>
11	<ul> <li>Molecular characterization/Evaluation</li> </ul>
9	<ul> <li>Professional dissemination (Database, web sites)</li> </ul>
4	<ul> <li>Broker between users and other genebanks</li> </ul>
2	<ul> <li>Pre-breeding</li> </ul>
4	<ul> <li>In situ/on-farm conservation</li> </ul>
2	<ul> <li>Search for duplicates</li> </ul>
1	<ul> <li>Training</li> </ul>
4	<ul> <li>Public communication</li> </ul>
1	<ul> <li>Strategic synthesis</li> </ul>
1	Data hyperlinks

## Material on offer from genebanks

- Some genebanks already offer specialist activities depending on in-house expertise (e.g. genomic analysis, in vitro propagation, cryopreservation, homogeneous lines, etc.)
- Should genebanks specialise more in:
  - Mutant collections?
    - No, but where they exist they should be managed by genebanks linked to breeders
  - Research populations
    - No, but where there is a local research requirement genebanks should curate the material for the local researchers, little point in producing homogeneous lines if there are no users

# Service through collaboration: how could genebanks and user communities better collaborate

- People need to 'know each other' to communicate better
  - Better integrate of the two communities (conservationists and breeders + other users)
  - Involve breeders in each of the ECPGR crop networks
  - Internet is not everything: need to have real face to face meetings
- Genebanks need to build up trust and respectful with the user communities
- ☐ Collaboration is key to sustainability