ECPGR strategy for PGRFA in Europe and links with the EU

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• **AEGIS** is operational. Accessions in AEGIS are characterized and evaluated.

• Quantity and quality of data in **EURISCO**, including *in situ* and on-farm data, have been increased. Functionality of EURISCO meets users' expectations.

• **In situ and on-farm conservation** and management of priority crop wild relative (CWR) and landrace (LR) populations are implemented throughout Europe. Mechanisms are in place for more effective utilization of the conserved germplasm.

• **Commitment and regular resources** of national governments are sustained or increased, and commitments and resources of the European Commission (EC), as well as of other potential donors towards ECPGR are increased.

• **Relations with users** of germplasm are strengthened.

• **Organizational structure and secretarial support** are adequate to effectively sustain the operations of ECPGR.
• Conservation
  • *Ex situ*: AEGIS operational but European collection to further increase
  • *In situ*: concept agreed for crop wild relatives (CWR)
  • *On-farm*: concept to be agreed for landraces, etc. (LR)
  • *In situ and on-farm* conservation and management for priority species / populations to be implemented throughout Europe

• Use
  • *Direct use* of PGRFA on farm (management) for (niche) markets
  • *Indirect use* of PGRFA in research and breeding for the improvement of varieties (and other research topics)
  • *Relations with users* of germplasm to be strengthened

• Documentation
  • *EURISCO*: Quantity and quality of data, including *in situ* and on-farm data, to be increased / improved
  • Phenotyping, genotyping, characterization and evaluation data and other *value adding data* to be included in EURISCO
  • *Functionality* of EURISCO to meet users' expectations
• **Operational framework**
  • **Commitment and regular resources** towards ECPGR to be increased, from
    • national governments,
    • the European Commission (COM),
    • other potential donors.

• **Organizational structure and legal basis** to be strengthened at EU and national levels

• **Secretarial support** adequate to effectively sustain the operations of ECPGR
EU / COM opportunities (1)

- **Conservation**
  - *Ex situ*: no regional, no EU; only national responsibility (only EAFRD Art. 28 based on voluntary national commitment)
  
  - *In situ*: no regional, no EU concept specific for CWR; focus outside food and agriculture

- **On-farm**: no regional, no EU concept specific for LR etc.; only EAFRD Art. 28 based on voluntary national commitment

- **Research infrastructure**: ESFRI, biological research collections or other research infrastructure?

- **Open question**: is there any “trans-national” argument for conservation of PGRFA (just as in nature conservation and species protection)?
  - Occurrence of species (CWR) does not stop at national borders
  - Expeditions and collections of PGRFA held *ex situ* across borders
  - On-farm?
EU / COM opportunities (2)

- **Use**
  - **Direct use** of PGRFA on farm (management) for (niche) markets
    - only (co)funding of “model” projects under EIP-Agri
  - **Indirect use** of PGRFA in research and breeding for the improvement of varieties (and other research topics)
    - funding of research under HORIZON 2020
    - Regulations of variety protection and seed marketing

- **Open question**
  - Is EIP-Agri closing all “remaining” gaps in the “research to marketing” chain also for direct use of PGRFA for innovative (niche) markets?
  - Is the regulatory framework for variety protection and seed marketing appropriate to support sufficient genetic diversity on farms?
  - Is EU ABS regulation No 511/2014 for Nagoya Protocol conducive for research and breeding of PGRFA?
**EU / COM opportunities (2)**

taken from A. Schneegans, DG-AGRI, H5 (2016)

- **FP7** research focus on more "upstream", pre-competitive research

- **Horizon2020** funding allows to get closer to market activities
EU / COM opportunities (3)

• Documentation
  • EURISCO: no regional, no EU; only national responsibility
  • value adding data to be included in EURISCO:
    • Some research projects (HORIZON 2020) generate phenotyping, genotyping, characterization and evaluation data and other value adding data but do not oblige / facilitate the integration of such data into EURISCO
  • Research infrastructure: ESFRI, biological collections or other research infrastructure?

• Open question:
  • is there any “trans-national” argument for documentation of PGRFA (just as for the seed catalogue)?
    • Users of PGRFA do not stop at national borders
    • AEGIS European collections (and future CWR sites) do not stop at national borders
    • Environmental and climate (value adding) data do not stop at national borders
    • Global Information System (ITPGRFA) requires “regional” input?
EU / COM opportunities (4)

- **Operational framework**
  - **Commitment and regular resources** towards ECPGR, from
    - national governments relatively stable, some countries missing
    - the European Commission (COM), so far none
    - other potential donors, very few?

- **Organizational structure and legal basis**
  - Legal basis to be strengthened at EU and national levels for gaps beyond research, rural development, marketing of seed

- **Secretarial support**
  - Future role of ECPGR as implementing agency for the EU/COM?
Interactions between ECPGR and EU / COM so far

• ECPGR replied to the questionnaire of the EU GEN RES programme
• ECPGR replied to the questionnaire on the EU green paper on research and innovation
• Invitation by the ECPGR Steering Committee to the EU/COM to become a permanent member of the Steering Committee of the ECPGR
• The ECPGR WGs and Secretariat have facilitated the drafting of numerous project proposals submitted to EU funding schemes
• Irregular contacts with EU/COM (e.g. DG research/FP7, DG Agri/870/2004 and DG Sanco.)
EU preparatory action: selected recommendations

• Re-inforce EU governance and secure links with international and national activities by setting up an EU coordination platform,

• Further develop R&D programmes for the dynamic conservation and management of GR, and promote national and regional R&D programmes exploring the sustainable use of GR for better food and nutrition,

• Develop an appropriate infrastructure for pre-breeding activities,

• Establish European Innovation Partnerships (EIP) operational groups to develop and reinforce GR valorisation projects of neglected and underutilised crops,

• Secure long term funding for the actions identified by developing an EU agrobiodiversity strategy and planning for activities during EU budget negotiations.
Recommendations

EU Agrobiodiversity Strategy

Programme for Plant Genetic Resources
Programme for Animal Genetic Resources
Programme for Forest Genetic Resources
Programme for Aquatic Genetic Resources
Programme for Microbial Genetic Resources
Recommendations

EU Programme for Plant Genetic Resources

- Ex situ conservation
- In situ conservation
- On farm conservation, management and direct use
- Research and breeding
- Documentation
- Regulatory framework
ECPGR could help in developing the EU Agrobiodiversity Strategy (on the conservation of genetic resources in food, agriculture and forestry)

ECPGR could help in developing the EU Programme for conservation and use of PGRFA

The ECPGR SC should offer the ECPGR *in situ* CWR and on-farm landrace conservation concepts to the EC for its consideration when developing the European *in situ* conservation concept for CWR and landraces as part of the EU programme on PGRFA

ECPGR could offer basic elements such as AEGIS, EURISCO, the Secretariat and experts / working groups for implementing the EU Programme for PGRFA
ECPGR could offer comments to the EU/COM in revisions of relevant legislations for PGR

ECPGR as competent technical advisory body and as implementing agency for project administration

ECPGR could express its interests for the future Research Infrastructure area and start a discussion within the plant genetic resources community and with ESFRI members for which areas they should support topics to be included in future project calls of the EU.

ECPGR could propose to include more research topics in the field of European cooperation on PGRFA as well as on capacity and infrastructure-building to conserve and utilize PGRFA.

ECPGR may wish to propose to the EU/COM the establishment of an ERA-NET for PGRFA for which ECPGR could play the role of the ERA-NET Coordinator.
Next steps

- ECPGR ExCo / Secretariat could send a letter to the EU/COM to propose such recommendations as agreed by the Steering Committee
  - Development of an EU Agrobiodiversity Strategy
  - Development of an EU Programme for conservation and use of PGRFA
  - To officially notify the EU/COM of the ECPGR *in situ* CWR and on-farm landrace conservation concepts to be taken into consideration when developing the PGRFA Programme
  - To send a list of recommendations to the EU/COM for further consideration