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Farmer's Pride

Networking, partnerships and tools to enhance *in situ* conservation of European plant genetic resources

Workshop 1 REPORT

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Frøsamlerne

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EXECUTIVE SUMMARY

Farmer's Pride is a three-year Community Support Action funded by the European Union under the Horizon 2020 Framework Programme. The project aims to enhance and promote the *in situ* management, conservation and use of plant genetic resources (PGR) in Europe to provide greater diversity for food, nutrition and economic security. Building on existing organizations and processes for PGR conservation and use in the region, the diverse actors involved in the project are working together to establish a supportive policy context and a Europe-wide network for *in situ* conservation and sustainable use of PGR.

Farmer's Pride Workshop 1 was the first of three workshops to provide forums for plant genetic resources (PGR) conservation and use stakeholders to discuss and make decisions on the development and establishment of the European Network for *In Situ* Conservation and Sustainable Use of Plant Genetic Resources. Fifty-six participants representing a diverse range of stakeholder groups convened to discuss and develop the concept of the network, make recommendations for its structure and functioning, and prepare a roadmap for next steps in its development. This report details the workshop proceedings which were carried out in three sessions: 1) Network stakeholders; 2) Network operation; and 3) Network governance and policy. Key messages arising from the workshop are summarized below.

Network stakeholders

- The wide and diverse range of PGR stakeholders presents a challenge for the successful establishment and long-term operation of the European Network. There must be a strong motivation for stakeholders to join the Network, therefore, effective means of communicating the purpose of the Network and benefits of becoming a Network partner tailored for all stakeholder groups will be paramount. It will also be essential to define clear roles for all stakeholders, include a balanced representation of the different stakeholder groups, imbue a sense of ownership, and promote collaboration and cross-sectoral cooperation.
- Benefits to stakeholders from participation in the Network include: i) improved access to and exchange of a greater breadth of PGR and associated knowledge; ii) increased opportunities for collaboration on research, development, marketing and advocacy initiatives; iii) greater recognition of their specific roles in PGR conservation and sustainable use and added value for their activities; and iv) collective awareness-raising of the value of conservation and sustainable use actions towards influencing a supportive policy environment.
- Transparency regarding the end-use of PGR and building trust between stakeholders will be fundamental to the success of the Network. In particular, there is a need to build bridges between the so-called 'formal' and 'informal' sectors, as well as to recognize Farmers' Rights in policies underlying the operation of the Network.

Network operation

- The European Network should as far as possible build on existing infrastructures (e.g. stakeholder and site networks, relevant organizations/institutes, policy frameworks and legislation), whether at subnational, national, or international level. However, it must also cater for the inclusion of individuals, whether farmers, plant breeders, landowners, or other interested stakeholders. Understanding the strengths and weaknesses of existing infrastructures, as well as commonalities between them, will be fundamental for the successful establishment and long-term operation of the Network.
- Acknowledging that there are divergent communities involved in crop wild relative (CWR) and landrace (LR) conservation, options for administration of the European Network include: i) one secretariat that provides services for conservation and sustainable use of PGR, whether CWR or LR; ii) the establishment of two networks which would operate through a joint platform; and iii) administration under one umbrella organization with parallel bodies managing CWR and LR.
- Formal recognition and long-term funding of the Network will be essential for its success. As a community, we need to lobby national and European policy-makers, stressing the need for permanent funding for its sustainable operation.
- Agreement on good practices for PGR conservation and sustainable use and harmonization of management standards should be sought as far as possible. Sharing of information and experience and the establishment of an evidence-base of best practice and associated guidelines will be important in this regard.
- Central to the operation of the Network will be the need for good information availability, management, and visibility, and any system used should cater for Network members to share and exchange information.

Network governance and policy

- As a tentative first step and vision for a future coherent and sustainable network, a draft concept for governance of the European Network, primarily from the point of view of CWR conservation and sustainable use was prepared and discussed. This requires further development and consideration regarding the integration of governance for the part of the Network relating to landrace/farmers' varieties conservation and sustainable use and will be presented at the next workshop.
- There are opportunities for using existing policies and legislation to support the operation of the Network as well as a need for new policies and legislation specifically for PGR conservation and sustainable use. Of particular note is the need for legislation to protect landraces/farmers' varieties and to enable new markets for farmers' products. Political recognition of Farmers' Rights in line with Article 9 of the International Treaty on PGRFA is also essential.
- Economic incentives are one mechanism for improving the implementation of existing international policies and legislation. However, few mechanisms exist for PGR, funding is very limited, and administrative costs can be high.
- The costs and benefits of *in situ* conservation needs to be understood so that this can be conveyed to policy-makers. This includes the recognition of non-market, private and public values of PGR such as food and nutrition security, safeguarding the environment, income

generation, improved livelihoods, and protecting agricultural landscapes and bio-cultural heritage.

- Conditions for access and use of PGR in the Network need to be clear. Existing laws and mechanisms are complex and off-putting for some stakeholders. In this regard, a guide to sharing and using PGR could help to explain the complicated rules to encourage and support stakeholders who otherwise may feel excluded.

1.0 INTRODUCTION

1.1 Workshop context

Farmer's Pride is a three-year Community Support Action funded by the European Union under the Horizon 2020 Framework Programme. The project aims to enhance and promote the *in situ* management, conservation and use of plant genetic resources (PGR) in Europe to provide greater diversity for food, nutrition and economic security. Farmer's Pride involves more than 40 national and international organizations representing stakeholder groups with an interest in the conservation and sustainable use of PGR, either as project partners, members of the External Advisory Board, or as Farmer's Pride Ambassadors¹.

Building on existing organizations and processes for PGR conservation and use—such as the Nordic CWR network, Europe's protected area (PA) system (Natura 2000), farmer and gardener networks, gene banks and community seed banks—the diverse actors involved in the project are working together to establish a supportive policy context and a Europe-wide network for *in situ* conservation and sustainable use of PGR. This network will involve both stakeholders (custodians and users of PGR) and sites (specific localities where wild and cultivated PGR are under active conservation management), and will require appropriate operational structures, governance and policies to ensure its effective functioning and longevity.

Farmer's Pride Workshop 1 was the first of three workshops to provide forums for the PGR conservation and use stakeholder communities to discuss and make decisions on the development and establishment of the European Network. The workshop involved 56 participants (Fig. 1; Annex 1) and comprised representatives of the Farmer's Pride project consortium and External Advisory Board, Farmer's Pride Ambassadors, national, regional and international policy-makers, representatives of the Dynaversity project² and other invited specialists and experts.

The workshop was held in association with a meeting of the project 'Wild genetic resources – a tool to meet climate change' (Nordic CWR project³) to benefit from: a) lessons learnt in the Nordic region on planning and creating a PGR conservation network; b) the opportunity to discuss how the Nordic CWR sites/populations could be integrated within the wider European Network; and c) the involvement of the stakeholders in the Nordic region in helping to meet the objectives of this first Farmer's Pride workshop.

1.2 Workshop aims and structure

The aims of the first Farmer's Pride workshop were for participants to discuss and develop the concept of the European Network, make recommendations for its structure and functioning, and prepare a roadmap for next developmental steps. The discussions were organized in three sessions: 1) Network stakeholders; 2) Network operation; and 3) Network governance and policy.

¹ Specialists representing various PGR stakeholder groups who are supporting the Farmer's Pride project by participating in the workshops and helping with other activities such as the promotion of surveys and dissemination of project publications.

² <http://dynaversity.eu/>

³ www.nordgen.org/en/plants/projects/wild-genetic-resources/

Within each session, participants divided into working groups (WGs) to address the specific workshop objectives and re-convened in plenary to report on and discuss the key WG discussion points and outcomes. The WGs were overseen by convenors (Farmer's Pride partners who are leading related project tasks), and each WG (and in some cases, sub-WG) was led by a chair, with a rapporteur responsible for recording the main outcomes of the discussions and for reporting in plenary.

1.3 Report content

This report summarizes the proceedings of the workshop opening session; details the session and WG objectives; summarizes the WG and plenary discussions; and outlines next steps in the development of the European Network.



Figure 1. Farmer's Pride Workshop 1 participants

2.0 WELCOME AND OPENING OF THE WORKSHOP

2.1 Welcoming addresses

The workshop was formally opened with welcoming addresses from: Merja Veteläinen, Boreal Plant Breeding, Chair of the Farmer's Pride External Advisory Board and chair of the workshop opening session; Gert Poulsen, Danish Seed Savers, Farmer's Pride partner and host of the workshop; and Birgitte Lund, Danish AgriFish Agency, ECPGR⁴ National Coordinator for Denmark.

2.2 Context and overview of the Farmer's Pride project

Nigel Maxted, Farmer's Pride Project Coordinator, University of Birmingham presented the context and an overview of the Farmer's Pride project, as well as introducing the newly funded project, 'GenRes Bridge' (Annex 2). First, he explained the broad context of the project: in Europe there is increasing demand for more varied and nutritious food, while at the same time climate change is causing adverse impacts on agricultural production and crop improvement is being hampered by a lack of availability of and accessibility to a broad range of PGR. Crop wild relatives (CWR) and landraces (LR) are vital sources of plant genetic diversity for crop improvement, yet this diversity is being eroded and the state of PGR conservation, both *ex situ* and *in situ*, is inadequate.

He noted the wealth of PGR diversity that exists in Europe and the various policy initiatives that Europe has signed up to that call for systematic and effective PGR conservation and sustainable use. Briefly, he provided an introduction to the ECPGR Wild Species Conservation and On-Farm Working Groups and the two concepts for improved *in situ* and on-farm conservation in Europe⁵. He then presented a model for *in situ* conservation of CWR in Europe (Fig. 2), emphasizing how important it is for national and European policy-makers and other stakeholders to buy in to the concept if the European Network is to be successful. He provided a brief overview of the main Farmer's Pride project elements: a) establishing a European network for *in situ* conservation and sustainable use of PGR; b) improving and promoting *in situ*/on-farm best practices; c) enhancing the use of *in situ* conserved PGR; and d) influencing the policy environment. He concluded by introducing the newly funded EU-funded H2020 project GenRes Bridge, which aims to produce integrated strategies for the management of crop, forest and animal genetic resources.

⁴ ECPGR: European Cooperative Programme for Plant Genetic Resources

⁵ Maxted, N., Avagyan, A. Frese, L., Iriondo, J.M., Magos Brehm, J., Singer, A. and Kell, S.P. (2015) *ECPGR Concept for in situ conservation of crop wild relatives in Europe*. Wild Species Conservation in Genetic Reserves Working Group, European Cooperative Programme for Plant Genetic Resources, Rome, Italy. www.ecpgr.cgiar.org/fileadmin/templates/ecpgr.org/upload/WG_UPLOADS_PHASE_IX/WILD_SPECIES/Concept_for_in_situ_conservation_of_CWR_in_Europe.pdf

ECPGR (2017) *ECPGR Concept for on-farm conservation and management of plant genetic resources for food and agriculture*. European Cooperative Programme for Plant Genetic Resources, Rome, Italy. www.ecpgr.cgiar.org/fileadmin/templates/ecpgr.org/upload/WG_UPLOADS_PHASE_IX/ONFARM/ECPGR_Concept_for_on_farm_final_05_05_2017_bis.pdf

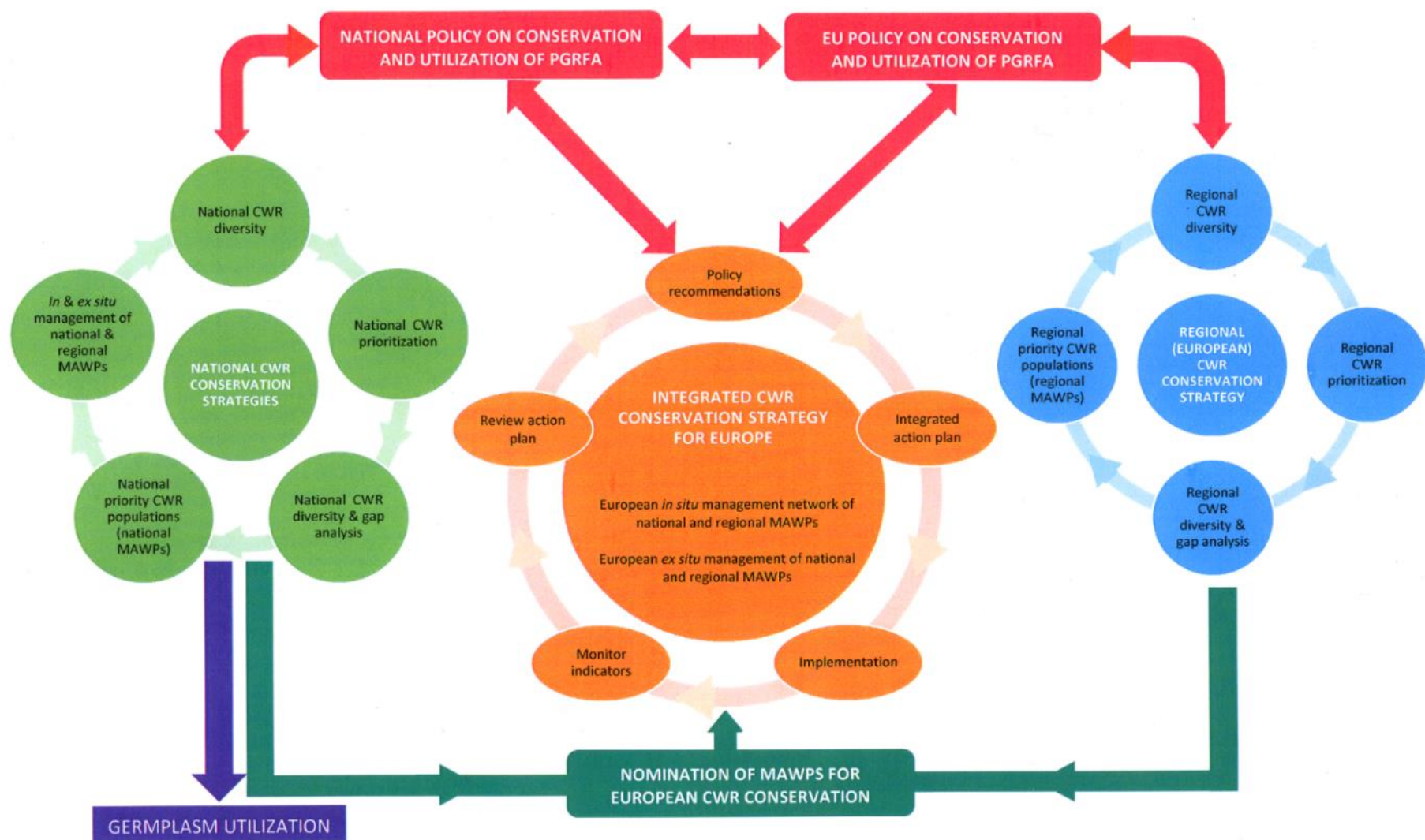


Figure 2. Concept for *in situ* CWR conservation in Europe (Maxted *et al.*, 2015)⁵

2.3 Workshop overview

Shelagh Kell, Farmer's Pride Project Manager, University of Birmingham provided an overview of the workshop (Annex 3), noting that this was the first of three annual international stakeholder workshops being convened to discuss and make decisions on the development of the European network and all related project activities. She explained that broadly speaking, the overall aims of the three workshops are to: 1) establish the foundations for the Network; 2) define the structure and management of the Network; and 3) communicate needs for the long-term sustainability of the Network to key politicians and policy-makers in association with the Network launch at the project's final conference (Fig. 3).

She highlighted the broad range of expertise at this first workshop and the extensive combined knowledge of all the participants present, emphasizing how critical this is for the success of the project and for the sustainability of the future European Network.

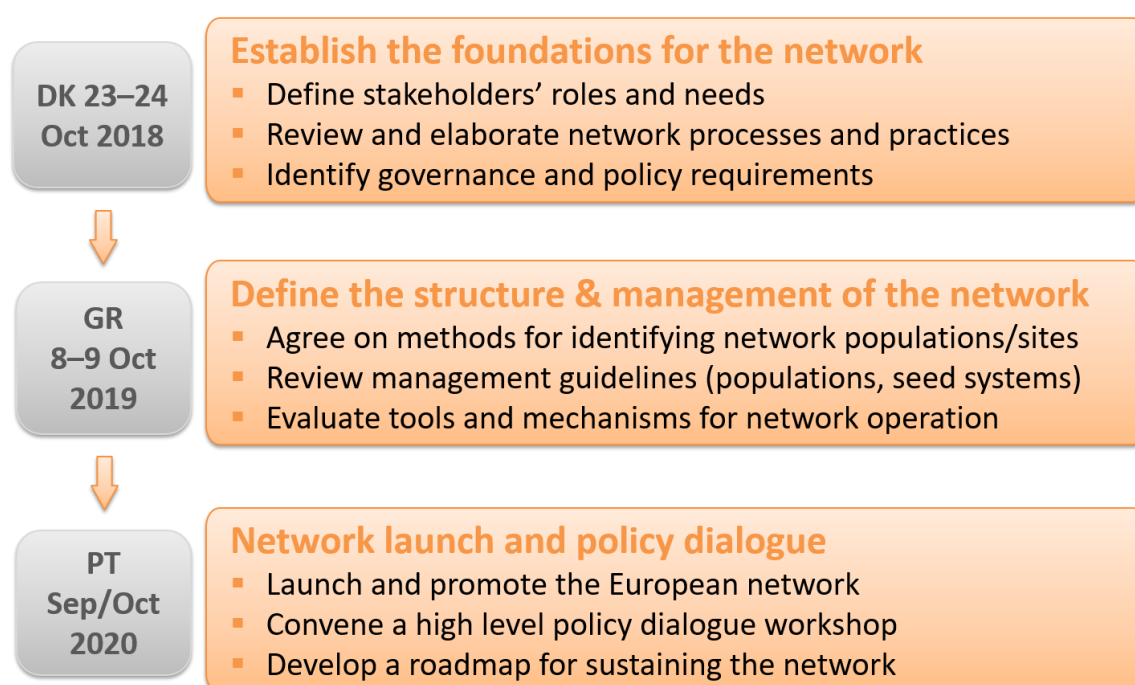


Figure 3. Broad aims of the three Farmer's Pride annual stakeholder workshops

Before introducing the workshop structure (Fig. 4), she reminded participants of the complexity of the process of establishing the Network due to the number and diversity of the different elements (Fig. 5). These include numerous stakeholder groups, existing networks and other organizations, countless PGR populations, and the many different processes, practices and policies already in place that play a role in PGR conservation and sustainable use across Europe.

The challenge is to identify these elements, understand and define their roles and the interactions between them, and determine what additional or adapted processes, practices and policies need to be in place to sustain an integrated network for *in situ* PGR conservation and sustainable use in the region.

Finally, Shelagh Kell explained the workshop schedule, documentation and logistics, introduced the WG convenors, and wished the participants a successful and enjoyable workshop.

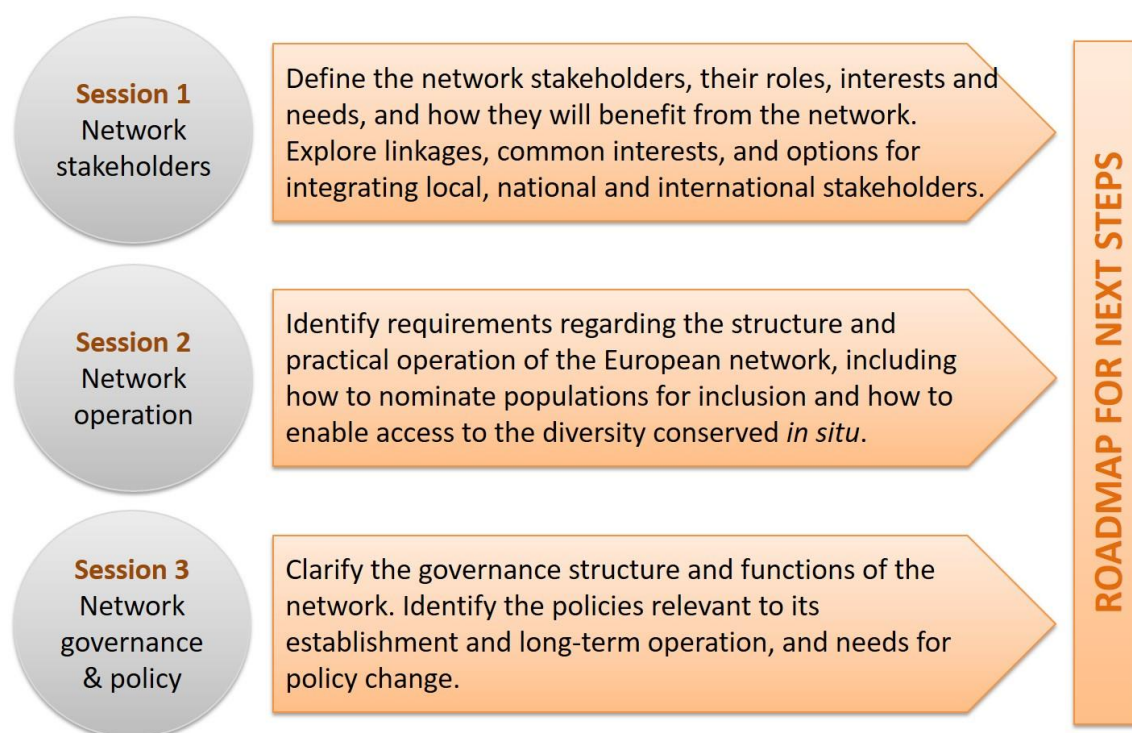


Figure 4. Workshop 1 structure



Figure 5. The complex process of establishing the European Network, which involves numerous elements

3.0 SESSION 1: NETWORK STAKEHOLDERS

3.1 Session 1: Overview

The goals of session 1 were to provide the foundations for defining the European Network and to set the scene for discussions around its operation, governance and related policy issues. It aimed at a clear understanding and definition of who (i.e. which types of stakeholders) will be involved in the European Network, their roles, interests and needs, and how they will benefit from being part of the Network. Linkages and common interests between stakeholder groups and options/mechanisms for integrating national and local stakeholders into an international network were also explored.

The session comprised three main WGs:

- 1A: Crop wild relative (CWR) conservation network stakeholders
- 1B: Landrace (LR) conservation network stakeholders
- 1C: PGR user network stakeholders

3.2 PGR conservation and use stakeholders

Before the participants divided into the WGs, Lorenzo Raggi, Farmer's Pride project partner, University of Perugia, gave an overview of the preliminary results of an online survey of PGR stakeholders⁶. He noted that Farmer's Pride launched an online survey on 03 May 2018 with the aim of understanding which stakeholders (organizations or individuals) are involved or have an interest in the conservation and sustainable use of PGR *in situ*, and that the survey is available in nine languages—English, Finnish, French, German, Greek, Hungarian, Italian, Spanish and Turkish—and a Swedish version is under preparation. It has been disseminated widely by the Farmer's Pride project collaborators and to date we have received 840 replies from 27 countries, including 543 replies from Turkey. Of the other 26 countries, Italy, Hungary, Spain and Greece have been the most active. From the survey results so far, the following main conclusions can be drawn:

- The types of stakeholders most interested in *in situ* conservation are (in descending order of the number of respondents): gene banks, amateur gardeners and their associations, NGOs, independent farmers and public bodies—although in Turkey the results were slightly different, with the number of responses being highest from public bodies, then independent farmers, citizens, farmer associations and gene banks. Further effort is needed to involve farmers' associations, seed companies and policy-makers in the survey.
- Different groups of stakeholders have different interests. Overall, the main interest is in cultivated materials (i.e. landraces and conservation varieties), however many are also interested in crop wild relatives and in wild plants in general.
- Conservation of genetic diversity *per se* is the main interest for the *in situ* stakeholders who responded to the survey (i.e. more than direct utilization, research or demonstration activities related to conservation).

⁶

https://beardatashare.bham.ac.uk/dl/fiNLc4YiDDD1v5tgMCCmbaat/12_Farmers_Pride_Workshop_1_Stakeholder_survey_preliminary_results.pdf?inline

- Most of the respondents showed an interest in being part of the new European *in situ* conservation and sustainable use network.

3.3 WG 1A: CWR conservation network stakeholders

3.3.1 WG 1A: Participants

Convenors: José Iriondo and Nigel Maxted; **Chairs:** Anna Palmé and Lothar Frese; **Rapporteurs:** Heli Fitzgerald and Parthenopi Ralli

Other participants

Barth, Susanne	Kutnjak, Hrvoje	Taş, Necla
Brandehof, Jelke	Mba, Chike	Thormann, Imke
Eisto, Kaija	McCarthy, Ben	Weibull, Jens
Kiviharju, Elina	Pinheiro de Carvalho, Miguel	Yenilmez-Arpa, Nihan

3.3.2 WG 1A: Objectives

- Review the roles and interests of the people and organizations involved in CWR conservation *in situ*;
- Agree on the stakeholder groups involved in CWR conservation that will be part of the Network;
- Define the specific roles/functions and/or interests/needs of the potential members within each group;
- Elucidate the benefits that each stakeholder group will gain from being part of the Network;
- Identify linkages (existing or potential) and common interests between stakeholder groups;
- Explore options/mechanisms for integrating national and local stakeholders into an international network.

3.3.3 Introduction

José Iriondo, Farmer's Pride project partner, Universidad Rey Juan Carlos, introduced the WG 1A session (Annex 4), outlining what we are ultimately aiming to achieve, the objectives of the WG session and knowledge and actions to build on, as well as highlighting the complexity of stakeholders involved. He introduced the specific questions to address and explained the structure and timetable of the WG discussions.

3.3.4 WG 1A: Discussion summary

The WG reviewed different categories of CWR stakeholder groups that will be part of the Network, considering the 'formal', 'informal' and commercial sectors, whether stakeholders will be directly or indirectly involved, and whether they are individuals, associations or other types of organizations, as well as stakeholders at different geographic levels (local/subnational/national). For each of the main stakeholder groups, the roles in (and benefits to) the Network, and benefits of being part of the Network to the group were identified.

The stakeholders identified include PA managers and administrators, farmers, foresters, other landowners and land managers, plant breeders, PGR and conservation researchers and policy-makers. Stakeholder organizations and/or institutes include gene banks, conservation and eco-service NGOs, government ministries responsible for PGR and nature conservation, seed

networks, ECPGR, European Environment Agency (EEA), and the IUCN and FAO Commissions. The group identified benefits to stakeholders from participation in the Network, such as access to genetic diversity, increased value of PA and environmental stewardship income, as well as benefits to the Network of having these stakeholders involved, such as maintenance of diversity, site protection and longevity, and back-up of diversity *ex situ* (Table 1).

The WG recommended that for the Network to be effective, the involvement of national and European institutions is essential. However, as there is no funding or time to create a new structure, the use of existing networks is advisable. This could involve:

- National PGR programmes expanded with additional funds to include experts from the *in situ* sector (i.e. another National Focal Point specialized in *in situ* conservation of CWR).
- Use of national infrastructures already established to meet Parties' obligations under the CBD to help integrate biodiversity and genetic resources sectors in response to global drivers affecting agriculture and the environment.
- Integration with the Natura 2000 Network.

The WG agreed to produce a detailed report of their discussion and a SWOT analysis of stakeholder groups.

Table 1. European Network – CWR stakeholder groups: roles and benefits

Sector	Stakeholder group	Role in (and benefit to) the Network	Benefits of Network involvement
'Formal'	Gene banks	Material duplication, informatics base, supply of diversity to users	Knowledge of diversity
	PGR research	Scientific support, characterization and evaluation	Access to diversity
	Conservationists	Maintenance of diversity, expertise in CWR diversity, population monitoring, land ownership, conservation advocacy	Awareness-raising of the value of conservation actions
	PA managers	<i>In situ</i> conservation of resource	Added value to PAs
	PA network administrators	Public awareness	Added value to PAs
	Policy-makers	Policy development and implementation	Advocacy for policy implementation
	National PGR programmes	Advice, knowledge sharing, advocacy	Knowledge sharing, policy/legal obligations
'Informal'	Conservation NGOs	Maintenance of diversity, expertise in CWR diversity, population monitoring, land ownership, conservation advocacy	Promotion of NGO activities
	Eco-service/ecotourism NGOs	Awareness-raising, income from conservation, added economic value	Promotion of NGO activities
	Farmers, foresters and other landowners/managers	Maintenance of diversity, land ownership, environmental stewardship (e.g., green cover, pollination)	Added value to land use and products, income through stewardship
	Local communities	Awareness-raising, land ownership, site management	
Commercial	Seed companies	Use of diversity, advocacy	Access to diversity
	Plant breeders' associations	Use of diversity, advocacy	Access to diversity

3.4 WG 1B: LR conservation network stakeholders

3.4.1 WG 1B: Participants

Convenors: Valeria Negri and Lorenzo Raggi; **Chair:** Gert Poulsen; **Rapporteur:** Judit Fehér

Other participants

Albert, Imre	Dalla Ragione, Isabella	Lund, Birgitte
Barata, Ana	Drucker, Adam	Marino, Mario
Bartha, Béla	Fehér, Judit	Poulsen, Gert
Bocci, Riccardo	Heinonen, Maarit	Scholten, Maria
Borgen, Anders	Kircalioglu, Gün	Tabaković, Aleksandar
Buscaroli, Claudio	Koutis, Konstantinos	Windfeldt, Louise

3.4.2 WG 1B: Objectives

- Review the roles and interests of the people and organizations involved in LR conservation *in situ*;
- Agree on the stakeholder groups involved in LR conservation that will be part of the Network;
- Define the roles/functions and/or interests/needs of the potential members within each group;
- Elucidate the benefits that the stakeholders will gain from being part of the Network;
- Identify linkages (existing or potential) and common interests between groups;
- Explore options/mechanisms for integrating national and local stakeholders into an international (European) network.

3.4.3 WG 1B: Discussion summary

The group identified the following stakeholder groups involved in LR conservation:

- | | | |
|---------------------|-------------------------|---------------------|
| – Farmers | – Agro-NGOs | – Researchers |
| – Gardeners | – Existing national and | – Policy-makers |
| – Breeders | international networks | – Rural communities |
| – Farmers' networks | – Gene/seed banks | – Consumers |

Key discussion points

- The benefits of LR conservation are not only economic—there are other motivations for stakeholders to be active in LR conservation, such as the recognition of their cultural and historical value, as well as the value of the landscapes and ecology of the sites in which they are cultivated. Further, the non-monetary benefits of stakeholders' involvement in the Network include: transparent collaboration; collaborating, being part of a bigger picture, and feeling less isolated; and facilitating seed access and other material exchange.
- Clear roles for different stakeholders and an understanding of how they can cooperate within the Network are needed. To achieve this, we need to analyse existing networks and define the common and different goals of the stakeholders involved.
- There is a need to create new markets for farmers' produce and to promote LR products.

Essential actions

- Create an online inventory of LR maintained *in situ*;
- Build on existing networks but also include individual farmers and plant breeders;
- Provide support for Farmers' Rights, building on existing experiences of different groups;
- Facilitate exchange of PGR and knowledge between countries;
- Focus not only the conservation of LR, but also on reintroducing them;
- Remove barriers between 'formal' and 'informal' sectors, 'north' and 'south', and move from theory to practice.

Policy-related needs

- Political recognition of Farmers' Rights, proper implementation of Article 9 of the International Treaty, and recognition of non-market, private and public values of landraces;
- Greater recognition of and support from the European political level (e.g. European Council, European Parliament) to people and organizations who work at national level to conserve and sustainably utilize LR;
- Support for changes in national legislation to protect LR and enable new markets for farmers' products (taking into account the different situations in different countries);
- Allocation of funds to farmers for LR conservation (e.g. through mechanisms such as the European Agricultural Fund for Rural Development – EAFRD).

Communication needs

- Find the right language to explain to farmers the relevance of landraces (especially those that currently have no recognized economic value), including the importance of research undertaken in the public sector;
- Tackle language barriers (e.g. the terms 'landrace' and 'network' mean different things to different people);
- Establish an ethos of trust between Network stakeholders;
- Provide examples of best practices for LR conservation on-farm;
- Use social media and other technology to engage stakeholders.

3.5 WG 1C: PGR user network stakeholders

3.5.1 WG 1C: Participants

Convenor: Theo van Hintum; **Chair:** Paul Townson; **Rapporteur:** Stephanie Kreide

Other participants

Andersen, Regine	Ducottet, Charline	Prohens, Jaime
Annamaa, Külli	Endresen, Dag Terje	Rasmussen, Morten
Carlson-Nilsson, Ulrika	Garoia, Valentina	Smekalova, Tamara
Čivić, Kristijan	Holubec, Vojtech	Veteläinen, Merja
Dolan, Katherine		

3.5.2 WG 1C: Objectives

- Define the potential users and user groups with an interest in the use of *in situ* PGR diversity and describe their interest in using these resources.
- Describe the reasons for the current limited use of *in situ* diversity (especially by the formal sector).
- Describe the different possible ways of improving access and thus the use.

3.5.3 WG 1C: Discussion summary

Potential users and their interests

- Plant breeders (CWR and LR): commercial varieties for profit.
- Farmers (LR): commercial product for profit; heritage and tradition value; more regional, locally specific environmental adaptations.
- Private conservation actors and enthusiasts (CWR and LR): maintain diversity and bio-cultural heritage.
- Gene banks: maintain resource to serve current and future users.

Reasons for current limited use

In addition to those described in workshop document 12⁷:

- Concern of misappropriation;
- Concern about legal liability;
- Ideological difference – “I am not giving to large multinational companies”;
- Very variable access to publicly funded pre-breeding (especially in the case of CWR);
- Lack of information about custodians, locations, potential values and terms of use.

Possible ways to improve access

In addition to those described in workshop document 12⁶:

- Increase awareness of the potential value of PGR diversity;
- Demonstrate practical protection against the fears of misappropriation and legal liability;
- Make the terms, conditions and laws designed to protect all parties as clear and simple as possible.

3.6 Session 1 plenary discussion

3.6.1 Introductory comments of the session chair

Jaime Prohens, Farmer’s Pride project partner, Universitat Politècnica de València, Spain (session chair) reiterated that the main aim of the session had been to provide the foundations for defining the European network for *in situ* PGR conservation and sustainable use by defining its stakeholders, their roles, interests and needs, and the benefits they would derive from the Network. He noted that the presentations of the three WGs had raised many questions, and highlighted some that were potentially interesting for discussion:

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https://beardatashare.bham.ac.uk/dl/fiDQ5ofzj1gALP5Rin3H348/07_Farmers_Pride_Workshop_1_WG1C_and_2C_working_document.pdf?inline

- The stakeholders with interests in *in situ* conservation are very heterogeneous. How can this complicate (or enhance) the Network?
- Networks for *in situ* conservation are much more dynamic than *ex situ* conservation networks. How can this be managed?
- How can the differences between networks for *in situ* conservation of cultivated and wild genetic resources be harmonized to create a single network?
- Some custodians may feel reluctant to share the genetic resources with some potential stakeholders (e.g., large multinational companies). How can it be ensured that the uses made of the germplasm are in agreement with the conditions of the custodians? And what conditions are reasonable for the custodians to place on the users?
- Natura 2000 PAs are of great relevance for conservation of wild species, but hotspots of CWR may not necessarily be found in these Natura 2000 areas. How can these cases be considered?
- Sometimes CWR are conserved *in situ*, but taxonomic identification requires experts in specific taxa. This may frustrate the practical use of these CWR. How can we improve this?
- Subsidies would certainly improve *in situ* conservation. How can it be guaranteed that the (limited) funds, if available, go to the most committed actors?

3.6.2 Plenary discussion summary

Network stakeholders

The question was asked as to whether we are aiming to establish a network of sites or stakeholders, noting that stakeholders need to feel ownership to sustain the Network. The project coordination confirmed that we are doing both and that stakeholders are key to the success of the project. In this respect, the online and field survey tools we are using in the project are fundamental to increase awareness of all stakeholders and to offer them membership of the European Network or the opportunity to be kept informed about the Network.

Collaboration between in situ and ex situ communities

The issue of the lack of funding for *in situ*/on-farm compared with *ex situ* conservation was raised, while acknowledging that even *ex situ* conservation is significantly under-funded. It was noted that the cost of *in situ* conservation needs to be understood so that this can be conveyed to policy-makers. There was some general agreement that stakeholders in both communities need to collaborate to support sustainable management of PGR *per se*, whether *in* or *ex situ*. Raising awareness and establishing links with the PA community is fundamental in this regard.

The question of how the scientific community can collaborate with farmers was raised and the need to share knowledge emphasized. It was suggested that gene banks should be considered as a service for farmers and that farmers need to understand that they have access to the scientific community.

Access and benefit-sharing

The issue was raised of how to protect Farmers' Rights as creators/owners of varieties. As it is not easy for farmers to certify their varieties, rules/guidelines are needed to protect them. In this context, it was noted that the UPOV system used by most plant breeders in Europe is open to interpretation.

It was suggested that the misappropriation of farmers' varieties might be over-estimated and it was noted that bio-piracy cases are very rare. There are however many benefits associated with access to genetic resources and it is important to find ways to facilitate access that does not limit benefit-sharing—for example, how to reward farmers for the genetic resources they contribute regardless of whether a commercial variety reaches the market.

Seed distribution and exchange

It was suggested that it would be helpful to understand how seed of farmers' varieties are distributed and whether this could be implemented within an official framework. However, it was noted that seed distribution/exchange varies greatly between countries and organizations.

Hindrances to the marketing of seed of farmers' varieties were also highlighted. For example, in Finland, farmers can sell seeds of 'conservation varieties' legally. However, they are obliged to use the same seed packaging system as used for commercially produced seed and because they are not producing large enough quantities of seed to use this system, they are not able to sell them.

Other issues

- The complexity of the LR conservation/management community continues to present a challenge but we need (in this project and as a community in general) to move towards meeting concrete objectives rather than discussing issues at a high level.
- It was noted that we should not ignore the important role of plant breeders in food security. They generate new diversity that goes back into the general pool of genetic resources for everyone to use. The need for all communities to work together towards a common aim was emphasized.
- The use of the term 'networking' was questioned, and it was suggested that the project might consider using different terms, such as 'platforms', 'communities of practice' etc.

4.0 SESSION 2: NETWORK OPERATION

4.1 Session 2: Overview

Session 2 aimed at a clear understanding and definition of requirements regarding the structure and practical operation of the European Network and mechanisms required to enable access to the diversity conserved *in situ*.

The session comprised three main working groups:

- 2A: Network structure and best practices
- 2B: Strengthening and integrating seed networks
- 2C: Promoting and enabling use of material conserved *in situ* in the Network

4.2 WG 2A: Network structure and best practices

4.2.1 WG 2A: Participants

Convenors: Lorenzo Raggi and Nigel Maxted; **Chairs:** Ana Barata (LR), Susanne Barth (CWR);

Rapporteurs: Maarit Heinonen (LR), Imke Thormann (CWR)

Other participants

Albert, Imre	Frese, Lothar	McCarthy, Ben
Brandehof, Jelke	Iriondo, José	Negri, Valeria
Buscaroli, Claudio	Kircalioglu, Gün	Palmé, Anna
Čivić, Kristijan	Koutis, Konstantinos	Pinheiro de Carvalho, Miguel
Dalla Ragione, Isabella	Kiviharju, Elina	Ralli, Parthenopi
Ducottet, Charline	Kutnjak, Hrvoje	Tabaković, Aleksandar
Eisto, Kaija	Lund, Birgitte	Weibull, Jens
Fitzgerald, Heli	Mba, Chike	Yenilmez-Arpa, Nihan

4.2.2 WG 2A: Objectives

- Review knowledge of existing *in situ* PGR or related conservation networks – structure, operation, best practices and lessons learnt;
- Discuss options and mechanisms for strengthening and sustaining *in situ* PGR conservation networks;
- Review draft guidelines for population inclusion in the European Network;
- Discuss how to integrate national and regional site/population nomination for inclusion in the European Network.

4.2.3 WG 2A: Introduction

Lorenzo Raggi gave an introductory presentation on the findings of a brief review of existing *in situ* PGR or related conservation networks (see Annex to workshop document 12⁸). The review identified 14 European and three non-European networks, and of these, 11 are related to LR (including traditional and conservation varieties) and six to CWR, endemic, or endangered/rare plant species. These are formal and informal networks, mostly funded as projects or by public bodies, and often coordinated by public institutions. In general, they have very inclusive approaches to participation and use a variety of tools for information exchange—including websites, social media, bulletins, meetings, workshops and training sessions.

The review identified several best practices relating to network functioning and conserved materials:

- Active promotion of the Network;
- Morpho-phenological characterization and *ex situ* backup;
- Promotion of cultivation and enlargement of cultivation areas;
- Seed production increased, exchanged and/or marketed;
- Web-based catalogue of materials and knowledge-sharing;

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https://beardatashare.bham.ac.uk/dl/fiNLC4YiDDD1v5tgMCCmbaat/12_Farmers_Pride_Workshop_1_Stakeholder_survey_preliminary_results.pdf?inline

- Reintroduction/reinforcement of threatened species;
- Regular censuses of the species present;
- Specialist unit assists in local genetic reserve management;
- Data required to track the process resulting in the designation of a genetic reserve is documented in an information system.

The main conclusions drawn from the review were:

- Farmers and gardeners are the main actors cultivating different types of local varieties;
- Gene banks, public bodies and research institutes play an important role in leading and coordinating LR and CWR networks;
- There is a general lack of long-term funding and this is a major challenge;
- A new European network must take into consideration economic aspects, national and regional laws, inclusion of the *ex situ* sector (particularly gene banks), the potential of new communication technologies for engaging members, and the best level of inclusivity for different groups of stakeholders;
- There must be a strong motivation for stakeholders to join the Network and the Farmer's Pride project must elucidate what these motivations are.

The group then split into two subgroups to address the objectives as they relate to CWR and LR *in situ* conservation respectively, and prepared separate reports for the plenary session.

4.2.4 WG 2A: Discussion summary

Network structure and best practices: CWR group

The group considered the strengths and weaknesses of existing *in situ* networks identified in the review carried out (see 4.2.3 and workshop document 12), but did not consider that any of these fit the model we are planning to use for a new Europe-wide network.

It was noted that some networks have long-term funding, which is a particular strength, while some conservation networks are unaware that they are conserving CWR, which is a weakness. The group concluded that the main actions needed to strengthen and sustain *in situ* CWR conservation networks are: a) harmonization of conservation management protocols; and b) making existing networks aware of the presence and value of CWR.

The minimum criteria for population/site inclusion in the European Network were identified as the CWR population: 1) being native at that location or has existed for 15 generations (for an annual species); 2) has unique genetic diversity; 3) is actively managed (baseline and monitoring); and 4) complements existing CWR populations already included in the Network.

Network structure and best practices: LR group

The group identified the main strengths and weaknesses of existing LR conservation networks, as well as actions needed to strengthen them (Table 2). The fact that the networks have diverse aims was felt to be both a strength and a weakness.

The group agreed that minimum standards are needed for LR populations to be nominated for inclusion in the European network, but that the draft guidelines (see workshop document 6⁹) may be too strict—for example, to specify that a LR has to have been grown over 15 generations. A question was raised as to what will happen to those LR that do not meet the criteria but may still have importance in the future. It was agreed that the nomination process should be simple to encourage nominations by farmers, farmers’ associations and the responsible authorities (e.g. by ECPGR NCs). The group concluded that the criteria need to be considered carefully through further discussion after the workshop. Ana Maria Barata agreed to coordinate this discussion with the aim of agreeing the criteria within the group in early 2019.

Table 2. The main strengths and weakness of existing LR conservation networks and actions needed to strengthen them

Strengths	Weaknesses
<ul style="list-style-type: none"> + People are very involved and are very proud of their LR + A large number and wide range of different stakeholders are involved + Management skills + Local community involvement 	<ul style="list-style-type: none"> – Low funding or self-funded, limiting development – <i>In situ</i> accessions are not (or barely) visible – Lack of strategy and continuity – Isolated (no clear role in PGR management) – Underestimated by the ‘formal’ PGR conservation sector – Lacking promotional skills
Actions needed to strengthen LR conservation networks	
<ul style="list-style-type: none"> ✓ Increased funding for PGR management ✓ Promotion of special products (e.g. slow food) ✓ New uses for LR: special diets (e.g. nutraceutical, testing new recipes), requiring research into LR as ingredients ✓ A range of successful showcases ✓ Visits by LR growers and associations to gene banks (and vice versa) to increase shared knowledge of PGR conservation ✓ A list of benefits to promote LR cultivation and Network membership 	

4.3 WG 2B: Strengthening and integrating seed networks

4.3.1 WG 2B: Participants

Convenor: Béla Bartha; **Chair:** Judit Fehér; **Rapporteur:** Morten Rasmussen

Other participants

Bocci, Riccardo

Dolan, Katherine

Scholten, Maria

Carlson-Nilsson, Ulrika

Poulsen, Gert

Windfeldt, Louise

4.3.2 WG 2B: Objectives

- Discuss options and mechanisms for integrating local and national seed networks in the wider European Network;
- Review knowledge of local and national seed networks – structure, operation, best practices and lessons learnt;
- Discuss options and mechanisms for strengthening and sustaining local and national seed networks.

4.3.3 WG 2B: Discussion summary

The group agreed to focus their discussion on the strengths and weaknesses of existing national seed networks (e.g. Danish Seed Savers; Norwegian Seed Savers; Pro Species Rara, Switzerland; and Föringen Sesam, Sweden) (Table 3), lessons learnt from these, and key factors to consider in the establishment of an international network.

Table 3. The main strengths and weakness of existing national seed networks

Strengths	Weaknesses
+ Represented in national advisory boards	– Not formally recognized
+ Influence – having a voice	– Operation depends on few individuals
+ Provide input to national regulations	– Limited/closed membership
+ Set up according to intentions of the ITPGRFA	– Lack of communication between sectors
+ Included in long-term national strategies and action plans	– Location (may be isolated)
+ Knowledge-sharing	– No policy work – no lobbying
+ Provide access to clonal archive/gene bank material/information	– Lack contact with seed companies
+ Organized and are committed to plant diversity conservation	– Unstable/no funding
	– No formal on-farm conservation implemented
	– Fragile as dependent on dedicated individuals

The group agreed that any new European network should be formally recognized, sustainably funded, inclusive of all relevant stakeholders, and provide for effective communication across sectors. In addition, the Network should:

- Facilitate access and sustainable use;
- Operate in line with the provisions of the International Treaty;
- Have a governance system based on transparency, clearly defined roles, adequate representation of all relevant stakeholder groups, and participatory approaches;
- Build on existing seed-saver organizations and community seed banks.

There was an outstanding question about whether we should aim to establish a ‘network’ or a ‘platform’.

4.4 WG 2C: Promoting and enabling use of material conserved *in situ* in the Network

4.4.1 WG 2C: Participants

Convenor: Theo van Hintum; **Chair:** Vojtech Holubec; **Rapporteur:** Theo van Hintum

Other participants

Andersen, Regine	Garoi, Valentina	Smekalova, Tamara
Annamaa, Külli	Holubec, Vojtech	Taş, Necla
Borgen, Anders	Kreide, Stefanie	Townson, Paul
Drucker, Adam	Marino, Mario	Veteläinen, Merja
Endresen, Dag Terje	Prohens, Jaime	

4.4.2 WG 2C: Objectives

- Define the elements required for improving access and increasing the use of *in situ* diversity;
- Describe these elements in some detail and describe how these could be created or improved;
- Describe the roles of the various actors involved in improving access and increasing the use of *in situ* diversity.

4.4.3 WG 2C: Discussion summary

- Both *in situ* and *ex situ* conservation are needed to combat the challenges society faces.
- On-farm (LR) and in-nature (CWR) are different topics – the boundaries between them are not always clear and there is a danger of ending up in semantic discussions.
- On-farm (at least part of it) is dynamic in its nature – this adds to the value but makes the concept of conservation and even documentation difficult.
- The simplest solution to access *in situ* diversity is to transfer it to a gene bank – this is limited by capacity problems, but *ex situ* facilities can and should play a supporting role.
- Access to information is essential. Seed-saver organizations can/should play a role in identifying on-farm material – a national ‘Centre for Genetic Resources’ could play a role in making that information accessible – a European website could be the first entry point.
- The value of *in situ* PGR must be clear – however, determining the value of CWR is problematic since publicly funded pre-breeding has disappeared in many countries – approaches of collaboration need to be sought. More characterization and testing of LR is also needed but difficult to realise. We need to look for mechanisms that stimulate the users to share their findings and observations (also a problem *ex situ*) – existing information should be made better available.
- Germplasm maintainers must understand the importance of their material ‘for the world’ and trust needs to be built with potential users. In this regard:

- If the use of the PGR is restricted to use ‘for food and agriculture’ that could be stressed and supports the use of SMTAs¹⁰;
 - Misappropriations of germplasm are possibly exaggerated – a clear registry of incidents in Europe needs to be created to allay fears and ensure lessons are learnt;
 - Case studies of the use of PGR from one part of the world to solve problems in another part of the world would be beneficial.
- Conditions for access and use have to be clear. In general, laws and MTAs¹¹ are too complicated (farmers do not like that) – think of the restrictions in quantities and conservation varieties – a ‘Farmer’s Guide to Sharing and Using’ could help to explain the complicated rules to farmers and farmers’ organizations. Seed laws also differ by country (often interpretation of European laws) – having an overview of these laws would help.
 - At a policy level, it is important not to increase complexity, but rather to aim to reduce it.
 - The Farmer’s Pride initiative led by the WG convenor to create a national entry point for access to PGR which gives information about existing sources of PGR and their availability *in situ* was well received. The system will be promoted when it has been populated with information from countries other than the Netherlands and Turkey, the two pilot countries.

4.5 Session 2 plenary discussion: summary

4.5.1 Introductory comments of the session chair

Kristijan Čivić, Farmer’s Pride project partner, Eurosite (session chair) summarized and contextualized some of the key issues arising from the WG reports. He noted that there are relevant networks and platforms at various levels (local, regional, national) from which we can learn and on which we can build in establishing the European Network—however, there will not be ‘out of the box’ solutions and we will need to find the best way to make the Network active, relevant and functional. Securing long-term funding is one of the main problems, but operationalization of the Network will also not be easy. A key issue is that because the constituency for the Network is very diverse (i.e., including actors in both CWR and landrace conservation and use, as well as *in* and *ex situ*), there are some strong sensitivities among some of the potential members that will need to be addressed (e.g., lack of trust between the landrace and gene bank communities). Furthermore, enabling and regulating the use of PGR conserved *in situ* is legally very complex. While on the one hand this not a straightforward issue to resolve, it could be that the process of establishing the Network will help to solve it.

Kristijan Čivić added that while the nature conservation sector might be the key towards doing more on the protection of CWR, there is a major lack of awareness on the issue within the community that needs to be addressed. Further, there is an obvious need for more coordination across Europe. There is a need to improve communication—both within the constituency and to the other relevant sectors—and cross-sectoral cooperation will be very important for the success of the Network.

¹⁰ Standard Material Transfer Agreements

¹¹ Material Transfer Agreements

4.5.2 Plenary discussion summary

Farmer inclusion in the European Network

The question of what types of farmers will be included in the Network was raised, as well as how the Farmer's Pride project will convey the message about the value of farmers' material to those farmers. In this regard, it was noted that there are showcases about farmers' seeds and *in situ* LR conservation available as outputs of EU FP7 projects. They include for example, the role of farmers' networks in setting the criteria for inclusion, the value of the knowledge of farmers as users of LR, linguistic issues, and the low input maintenance of high value landscapes that also contain many wild species (e.g. by crofters in Scotland).

The approach of the project in establishing a LR network was questioned. How will the process of approaching farmers to invite them to join the Network happen in reality, especially considering that there is an issue of trust that first needs to be worked on? Given the limited resources of the project, would it be better for Farmer's Pride to focus on the establishment of the CWR conservation network and specific aspects such as collaboration between gene banks and farmers at national level and pilot a process to strengthen relations?

The Project Coordinator emphasized that we need to implement concrete actions for LR conservation and noted that during a recent talk at the European Parliament to promote and raise awareness, he had emphasized that further extinctions of LR varieties will occur if nothing is done to support farmers within the context of the Common Agricultural Policy (CAP). A similar point will be made at national level in the UK regarding the nation's agricultural bill. It is much more straightforward to move ahead with CWR conservation than it is for LR, but it is very important to move ahead on the LR side as well and the project should not give up on one unified system for both CWR and LR.

Specifically, the role of FPAs in communicating with farmers was raised. How can FPAs inform farmers that they are part of this project and supported by a group of people who want to help give value to the motivation they already have? It was suggested that the production of a guide for farmers on exchange and use of their material would be extremely useful. While we may not have the resources to achieve this within the current project, we can set an agenda for what is needed in the future.

Other issues

- It was suggested that one option to strengthen LR conservation at national level could be to increase awareness among LR farmers of the various funding programmes available (e.g., the European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI)¹².
- The processes of providing access to PGR need to be unified across the European Network but this will be highly complex due to different procedures used in different countries.

¹² <https://ec.europa.eu/eip/agriculture/en/european-innovation-partnership-agricultural>

- A discussion on minimum standards for population inclusion in the European Network and how to nominate them needs to continue and it was suggested that members of the ECPGR Wild Species Working Group could be involved to validate the standards.
- The Farmer's Pride and Dynaversity projects are running in parallel with the same objectives. However, Dynaversity is more involved with grassroots movements (seed savers, farmers' organizations etc.). There is a need to see the complete picture across both projects in the next two years and to ensure complementarity of approaches.
- It was suggested that we should not overlook non-Annex I crops. In Europe we are for example benefitting from bioenergy crops.

5.0 SESSION 3: NETWORK GOVERNANCE AND POLICY

5.1 Session 3: Overview

Session 3 aimed to clarify the governance structure required for the Network, as well as to identify the policies relevant to its establishment and long-term operation, and needs for policy change.

The session comprised two main working groups:

- 3A: Network governance and operationalization
- 3B: The policy environment for Network governance and operationalization

5.2 WG 3A: Network governance and operationalization

5.2.1 WG 3A: Participants

Convenors: Nigel Maxted, José Iriando, Valeria Negri and Lorenzo Raggi; **Chairs:** Chike Mba, (CWR subgroup), Louise Windfeldt (LR subgroup); **Rapporteurs:** Kaija Eisto (CWR subgroup), Louise Windfeldt (LR subgroup)

Other participants

Barata, Ana	Frese, Lothar	Pinheiro de Carvalho, Miguel
Bartha, Béla	Heinonen, Maarit	Ralli, Parthenopi
Buscaroli, Claudio	Holubec, Vojtech	Smekalova, Tamara
Carlson-Nilsson, Ulrika	Kiviharju, Elina	Tabaković, Aleksandar
Čivić, Kristijan	Kreide, Stefanie	Taş, Necla
Ducottet, Charline	Kutnjak, Hrvoje	Thormann, Imke
Fitzgerald, Heli	Palmé, Anna	Veteläinen, Merja
		Weibull, Jens

5.2.2 WG 3A: Objectives

- Define the functions of the Network;
- Review options for the European Network governance structure – existing agencies, organizations and processes;
- Make recommendations for a sustainable solution to the Network operationalization;

- Discuss how CWR and LR diversity maintenance can be integrated within one network;
- Discuss options and mechanisms for integrating existing *in situ* PGR conservation networks in the wider European Network;
- Consider how the European Network could be integrated within a global *in situ* network for PGR conservation and sustainable use.

5.2.3 WG 3A: Introduction

Nigel Maxted gave an introduction to WG3A. He reminded the group that FAO has recognized the need to establish global, regional and national networks for *in situ* conservation action to:

- Support coordination of effort;
- Provide methodologies/tools to support implementation;
- Help raise resources for implementation and management;
- Create greater awareness of the value and necessity of *in situ* conservation of agrobiodiversity.

Based on this, the functions of the European Network could include:

- Awareness-raising at global, regional and national levels of the critical importance of PGR existing outside the *ex situ* conservation realm – this function would apply to several socio-economic domains, including food and nutritional security, safeguarding the environment, income generation, and improved livelihoods;
- Sharing of information and experience – one essential activity will be to establish an evidence-base of best practice to aid those undertaking *in situ* PGR conservation;
- Strengthening of partnerships and linkages that could foster viable “communities of practice” for the conservation, management and sustainable use of PGR outside gene banks;
- Generation, coordination and implementation of tools, initiatives and interventions that could be relevant to *in situ* conservation;
- Implementation of evidence-based interventions in the areas of *in situ* conservation, with a view to demonstrate positive impacts at the country level;
- Mainstreaming the conservation of PGR in nature reserves and other PAs.

He suggested that the Network governance should be designed to best fit the achievement of our overall goal: to maximize *in situ* conserved CWR/LR diversity maintained in Europe as a resource for stakeholder community use. This could be built as a new network or from what already exists. By relying to a great extent on the infrastructure already built to conserve biodiversity and natural habitats, an *in situ* PGR conservation network could become operational in a quick and efficient way. For CWR, he highlighted the option of building on the work of Eurosite (coordinator of the European Network of managers of natural sites, managing a significant number of sites comprising the EU Natura 2000 Network) to help bridge the divide between the conservation of biodiversity and agrobiodiversity in PAs.

5.2.4 WG 3A: Discussion summary

After an initial discussion, the group split into two subgroups to address the objectives as they relate to CWR and LR respectively, and prepared separate reports for the plenary session.

CWR sub-group

Network functioning

- Principles and procedures for inclusion of sites/populations in the Network are needed;
- ‘Function’ needs money – fundraising must therefore be considered;
- An important function of the Network is data management, both of curatorial (monitoring) and use promotion (characterization/evaluation) data, and further compilation and storage should be harmonized;
- Will it be a network of sites and/or partners? Probably sites but membership of the Network will provide partners with kudos and tools to help manage the sites. Network membership will necessitate PA and gene bank managers, and ministries of agriculture and environment working closely together.

One or two networks?

As the goal of both CWR and LR networking is to conserve diversity, a single network could be stronger. However, it may be necessary to have two network ‘branches’ with a shared secretariat because policies and legislation relating to CWR and LR conservation and sustainable use, as well as the entities responsible, are significantly divergent.

Integration of existing networks

The European Network should also be used to bring together and promote integration of the agrobiodiversity and biodiversity communities. National representatives should be brought together and use every opportunity to work under the same umbrella. However, it is noted that CWR *in situ* genetic conservation is not classified as a specific form of nature protection according to the IUCN Protected Area Categories (Dudley, 2008¹³).

Network governance

The group designed a model for a potential CWR network governance structure and agreed to present this in plenary for consideration (Fig. 6).

LR sub-group

Network functioning

The Network should:

- Assist farmers in seeking funding opportunities;
- Involve farmers in the process of its creation;
- Help in creating a positive policy environment;

¹³ Dudley, N. (ed.) (2008) *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN. x + 86pp. WITH Stolton, S., P. Shadie and N. Dudley (2013). IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, Gland, Switzerland: IUCN. xxpp.
<https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf>

- Be congruent with the concept of a global network;
- Be based on transparency, openness and good communication.

One or two networks?

LR are cultivated in PAs where CWR are also present – we can start from these populations and areas (there are already examples of this in Portugal and Italy).

Other discussion points

Several other points were discussed – in particular, the possibility of creating a European Network ‘label’ that could help farmers to obtain higher prices for their LR products to sustain their incomes.

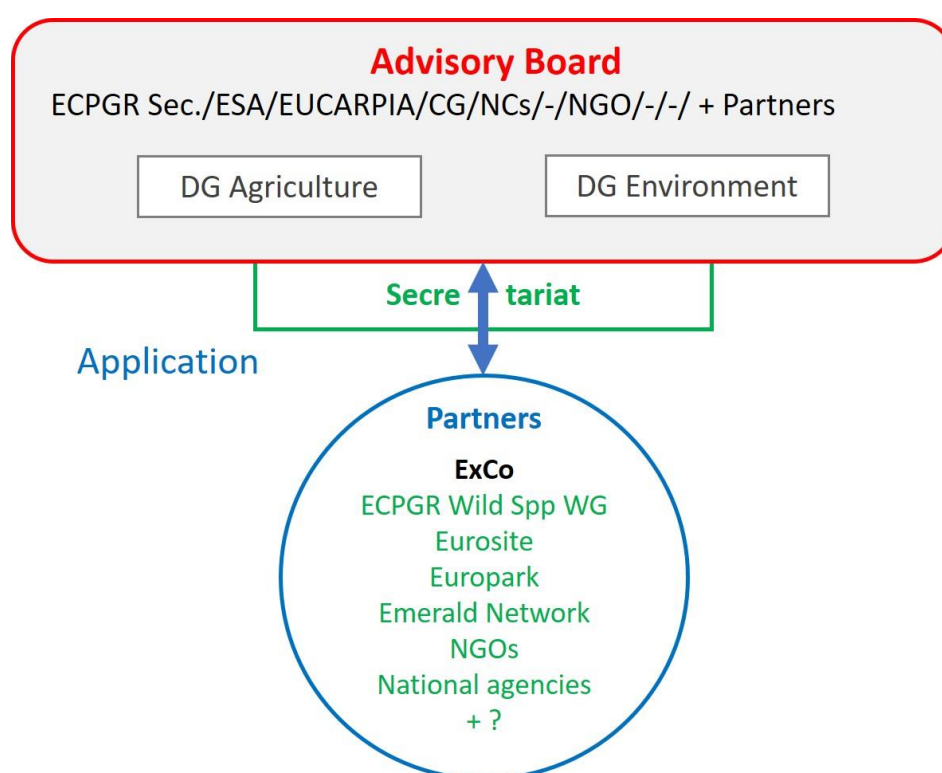


Figure 6. Proposed European Network governance structure (WG3A – CWR)

5.3 WG 3B: The policy environment for network governance and operationalization

5.3.1 WG 3B: Participants

Convenors: Ben McCarthy and Adam Drucker; **Chairs:** Mario Marino and ?; **Rapporteurs:** Nihan Yenilmez-Arpa and Adam Drucker

Other participants

Albert, Imre	Dalla Ragione, Isabella	Lund, Birgitte
Andersen, Regine	Dolan, Katherine	Poulsen, Gert
Annamaa, Külli	Endresen, Dag Terje	Prohens, Jaime
Barth, Susanne	Fehér, Judit	Rasmussen, Morten
Bocci, Riccardo	Garoia, Valentina	Scholten, Maria
Borgen, Anders	Kircalioglu, Gün	Townson, Paul
Brandehof, Jelke	Koutis, Konstantinos	Van Hintum, Theo

5.3.2 WG 3B: Objectives

- Evaluate the adequacy of the current biodiversity–agriculture–food policy landscape in supporting *in situ* conservation of PGR;
- Identify key issues in the current policy landscape that prevent better harmonization across these policy drivers;
- Develop appropriate policy responses and delivery mechanisms to improve *in situ* conservation of PGR, including statutory protection, incentives, advice and direct conservation action.

5.3.3 WG 3B: Introductions

Ben McCarthy, Farmer's Pride project partner, Plantlife International, gave an introductory presentation on the objectives of the group session and specific questions to answer:

- What are the main barriers to better use of PGR and how should policies be harmonized?
- How should land managers be supported to conserve CWR?
- How should farmers and growers be supported so a broader range of crops are maintained *in situ* to improve food and nutritional security and support a more resilient agricultural landscape?
- What key messages should be developed so that policy-makers secure better alignment between biodiversity conservation and agricultural policy objectives across Europe?
- What key events are taking place across Europe in the next 24 months where the Farmer's Pride collaborators should raise awareness and advocate for better *in situ* conservation of PGR?

He highlighted several elements of the existing European policy framework to be taken into account in the group's discussion: the EU Habitats Directive; Biodiversity Strategy; CAP; Research and Innovation Programme; Access and Benefit Sharing (ABS) regulations; ECPGR Concepts for CWR/LR *in situ* conservation.

Adam Drucker, Farmer's Pride project partner, Bioversity International, gave an introductory presentation on his work on incentive mechanisms for cost-effective on-farm conservation of agrobiodiversity in Peru. This includes methods for assessing Total Economic Value (TEV) of varieties or breeds to help prioritize conservation efforts and potential schemes for Payments for Agrobiodiversity Conservation Services (PACS).

The group then split into two sub-groups and reconvened to prepare a joint report.

5.3.4 WG 3B: Discussion summary

Barriers to PGR use

- International policy frameworks exist but the policies are not or are being poorly implemented;
- Existing national legislation and policy is not coherent or in line with the treaties – improvements are needed in marketing (variety release [registration] and seed distribution), phytosanitary, labelling, ABS, intellectual property rights (IPR), protections under the International Union for the Protection of New Varieties of Plants (UPOV), and seed marketing laws (and related directives);
- Governments are not held accountable and their reports do not always reflect reality;
- Genetic resources can often fall between the cracks of the responsibilities of ministries of environment and agriculture;
- The biodiversity conservation community is well placed to support *in situ* PGR conservation, but this issue is often not on their radar;
- Lack of capacity within the PGR community – sharing best practice can help to build capacity.

Support for farmers, growers and other land managers

- Improved systems could be implemented to help determine what diversity should be prioritized. In some countries (e.g. Italy) there is a more inclusive process for this. It is important not to have a fixed list due to the dynamics of evolution *in situ*, but even *ex situ* collections can be dynamic (e.g. new batch numbers for new accessions);
- A critical mass of farmers is required to conserve a gene pool;
- The need for conservation vs. reintroduction differs between countries;
- Support is needed for farmers to breed their own varieties.

Policy change

- Economic incentives may be seen as one mechanism for improving the implementation of international policy and legislation. Some incentives already exist – mainly for animal genetic resources – however, even where these mechanisms exist for PGR, funding is very limited and administrative/verification/monitoring costs can be high;
- Better coordination is needed to implement the existing treaties;
- The range of mechanisms required includes legislation, incentives, advice, research and direct conservation action;
- European biodiversity legislation is difficult to change, so consider 'bolt-ons' as opposed to re-opening directives.

Key events for advocacy

- Agri Outlook conference, Belgium, December 2018
- GBIF¹⁴ Europe, Poland, April 2019
- ITPGRFA Ad Hoc Technical Committee on Sustainable Use, May 2019
- Expert Group on Farmers' Rights, May 2019
- Regional meetings in Asia, Africa and Latin America on Conservation and Sustainable Use of PGRFA according to the ITPGRFA, March–June 2019
- GBIF GB26, the Netherlands, 17–18 October 2019
- Biodiversity_Next TDWG conference 2019, the Netherlands, 21–25 October 2019
- International Barcode of Life conference (iBOL) 2019, Norway
- Nordic Society OIKOS, Nordic location, 2019
- Eurosite anniversary annual meeting, autumn 2019

5.4 Session 3 plenary discussion: summary

5.4.1 Introductory comments of the session chair

Jens Weibull, Farmer's Pride Ambassador, Swedish Board of Agriculture (session chair) opened the floor for discussion, highlighting the complex nature of the issues and raising the question of how we can make use of existing structures.

5.4.2 Plenary discussion summary

European Network governance structure

As an outcome of the workshop, and as a tentative first step and vision for the future, the project has a draft concept for a governance structure for the European Network regarding CWR conservation and sustainable use. The specific functions of this governance structure need to be elaborated and it was agreed that the concept would continue to be developed after the workshop.

The development of a similar governance structure as a basis for LR conservation and sustainable use in the Network was discussed. It was commented that the model for CWR conservation would not be appropriate for LR conservation. However, the Project Coordinator encouraged the LR conservation community to think about how governance could be achieved as we must look towards a future coherent and sustainable network.

Integration of CWR and LR population management in one European network

The issue of how to integrate CWR and LR conservation and sustainable use within one European network was discussed, noting that different communities are involved. While acknowledging that there are many different stakeholders involved, it was suggested that the Network could operate through one secretariat providing services for conservation and sustainable use of PGR, whether CWR or LR. It was also suggested that it would be easier to obtain funding for one network.

An alternative suggestion made is to establish two networks which would operate through a joint platform, especially considering that the CWR and LR communities have many common

¹⁴ Global Biodiversity Information Facility
Farmer's Pride Workshop 1: Report

partners and are therefore not completely separate. A further suggestion was that because the European network will have a common over-arching aim, it could operate under one umbrella organization with parallel bodies managing CWR and LR. An additional comment was that we must consider three entities under one over-arching platform: agriculture, environment, and culture.

It was also noted that the concept of an over-arching platform for both CWR and LR conservation and sustainable use was pertinent to discussions within the International Technical Working Group on PGRFA (ITWG PGRFA), members of which have been deliberating on the concept of establishing an integrated network for *in situ* and on-farm conservation. The ITWG PGRFA has proposed the staging of a symposium to discuss this, amongst other issues¹⁵. It was suggested that the Farmer's Pride project could provide input to the symposium and in turn the outcomes of the symposium could be highly relevant to inform the project.

Funding the European Network

The question of the price of the proposed Network governance structure and how it will be funded was raised. In response, it was noted that the European Commission (EC) has allocated funding for two projects under the call for the establishment of a network for PGR conservation. As a community, we need to continue to lobby and negotiate with the EC to put long-term funding into the operation of a sustainable PGR network which for example will need to be supported by a secretariat. The aim is for the establishment of a permanently funded network.

It was noted that the EC may be expecting the European PGR community to get organized and then will provide funding. In a similar fashion, ECPGR had to justify its existence before obtaining funding from the member countries. Also, because the Farmer's Pride project will end in 2020, the PGR community will have to work hard on securing the funding to enable the continuation of the initiative.

Other issues

- It was suggested that it is unlikely that individual farmers will join a European network and that we need to work with local networks.
- The question of how the Farmer's Pride and Dynaversity projects could improve coordination was raised and it was suggested that FPAs could play a role in bringing the two projects together. It was also commented that the approaches (one more 'top-down' and the other more 'bottom-up') could be complementary. The Dynaversity representative provided a brief overview of that project to the participants.

¹⁵ See CGRFA/WG-PGR-9/18/REPORT, paragraphs 10 and 11: www.fao.org/3/MX725en/mx725en.pdf
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6.0 CLOSING SESSION

Chike Mba, Farmer's Pride External Advisory Board member, FAO Plant Production and Protection Division (AGP) (session chair) provided positive feedback on the workshop and highlighted the importance of the project and the actions being taken in Europe for global *in situ* PGR conservation, noting that the European experience could act as an example for other regions.

Shelagh Kell presented a final summing up of the workshop (Annex 5), listing the specific agreed actions arising from the WG discussions, general post-workshop actions, and next steps looking ahead to Workshop 2 which will take place in October 2019. She thanked the participants for their hard work during the workshop, noting that their contributions are critical to the success of the project and that the workshop had given greater impetus to move ahead with the project tasks. She highlighted the importance of continuing a dialogue amongst the project partners, FPAs, members of the EAB and other involved experts between the first and second workshops, as well as seeking their involvement in planning the Workshop 2 programme. She also encouraged all the collaborators present to promote the importance of PGR in the region and the development of the European network.

Jenny Hawley, Farmer's Pride project partner, Plantlife International, provided some logistical information for the afternoon and evening events. Nigel Maxted, Farmer's Pride Project Coordinator thanked the workshop participants for their contributions and formally closed the workshop.

ANNEX 1. LIST OF PARTICIPANTS

Farmer's Pride Ambassadors

Imre Albert	– Asociatia Bioagricultorilor, Romania
Regine Andersen	– Fridtjof Nansens Institut, Norway
Küllü Annamaa	– Estonian Crop Research Institute
Susanne Barth	– Agriculture and Food Development Authority, Ireland
Anders Borgen	– Agrologica, Denmark
Claudio Buscaroli	– Centro Ricerche Produzioni Vegetali, Italy
Miguel Carvalho	– ISOPlexis Genebank, University of Madeira
Isabella Dalla Ragione	– Archeologia Arborea Foundation, Italy
Lothar Frese	– Julius Kühn-Institut, Germany
Vojtech Holubec	– Crop Research Institute, Czech Republic
Konstantinos Koutis	– AEGILOPS – Network for Biodiversity and Ecology in Agriculture, Greece
Hrvoje Kutnjak	– University of Zagreb, Croatia
Maria Scholten	– Independent expert, Scotland
Tamara Smekalova	– NI Vavilov Research Institute of Plant Industry, Russian Federation
Aleksandar Tabaković	– Ministry of Agriculture, Forestry and Water Management, Serbia
Paul Townson	– Lion Seeds Ltd, United Kingdom
Jens Weibull	– Swedish Board of Agriculture
Nihan Yenilmez-Arpa	– Ministry of Forestry and Water Affairs, Turkey

Farmer's Pride External Advisory Board

Chike Mba	– FAO Plant Production and Protection Division (AGP)
Merja Veteläinen	– Boreal Plant Breeding, Finland

Nordic CWR project partners

Dag Terje Endresen	– GBIF Norway, NHM, University of Oslo
Heli Fitzgerald	– Finnish Museum of National History, University of Helsinki
Elina Kiviharju	– National Program for Genetic Resources, Finland
Birgitte Lund	– Danish AgriFish Agency
Morten Rasmussen	– Norwegian Genetic Resource Centre

Dynaversity project representatives

Riccardo Bocci	– Rete Semi Rurali, Italy
Charline Ducottet	– French National Institute for Agricultural Research

Other invited experts

Kaija Eisto	–	Metsähallitus Parks and Wildlife Finland
Mario Marino	–	Secretariat, International Treaty on PGRFA
Imke Thormann	–	German Federal Office for Agriculture and Food
Louise Windfeldt	–	University of Copenhagen, Denmark

Farmer's Pride project partners

Ana Barata	–	Instituto Nacional de Investigação Agrária e Veterinária, Portugal
Béla Bartha	–	Pro Specie Rara, Switzerland
Jelke Brandehof	–	Eurosite
Ulrika Carlson-Nilsson	–	Nordic Genetic Resource Centre
Kristijan Čivić	–	Eurosite
Katherine Dolan	–	Arche Noah, Austria
Adam Drucker	–	Bioversity International
Judit Fehér	–	Research Institute of Organic Agriculture, Hungary
Valentina Garoia	–	European Seed Association
Jenny Hawley	–	Plantlife International
Maarit Heinonen	–	Natural Resources Institute, Finland
José Iriondo	–	Universidad Rey Juan Carlos, Spain
Shelagh Kell	–	University of Birmingham, United Kingdom
Gün Kircalioglu	–	Aegean Agricultural Research Institute, Turkey
Stefanie Kreide	–	Leibniz Institute of Plant Genetics and Crop Plant Research, Germany
Nigel Maxted	–	University of Birmingham, United Kingdom
Ben McCarthy	–	Plantlife International
Valeria Negri	–	Università Degli Studi di Perugia, Italy
Anna Palmé	–	Nordic Genetic Resource Centre
Gert Poulsen	–	Danish Seed Savers
Jaime Prohens	–	Universitat Politècnica de València, Spain
Lorenzo Raggi	–	Università Degli Studi di Perugia, Italy
Parthenopi Ralli	–	Hellenic Agricultural Organization – Demeter, Greece
Necla Taş	–	Aegean Agricultural Research Institute, Turkey
Theo van Hintum	–	Centre for Genetic Resources, The Netherlands

ANNEX 2. CONTEXT AND OVERVIEW OF THE FARMER'S PRIDE PROJECT




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Introduction to Farmer's Pride and the new GenRes Bridge: A community based approach to in situ PGRFA conservation


Nigel Maxted and Shelagh Kell

Farmer's Pride 1st Stakeholders Discussion
Marienlyst Strandhotel, Helsingør, Denmark — 22 October 2018



CWR / LR: a critical resource for 21st century agriculture

- CWR defined by their use in trait donation / LR defined by direct use and as gene donors
- CWR value \$115B for 29 major crops (PWC 2013), no figure for LR
- CWR 16% threatened (Kell *et al.* 2012), no figure for LR
- Lack of diversity is limiting crop improvement (McCouch *et al.* 2011)
- Poorly conserved
 - Ex situ 76% of taxa need collecting
 - In situ just a handful of sites
 - No figure for LR
- Need to improve conservation for use



Wild carrots on the Cornish coast



Policy context


- CBD Strategic Plan agreed in Nagoya (2010) – Target 13 of 20
"Target 13. By 2020, The status of crop and livestock genetic diversity in agricultural ecosystems and of wild relatives has been improved. (SMART target to be developed at global and national levels) In addition, *in situ* conservation of wild relatives of crop plants could be improved inside and outside protected areas."
- CBD Global Strategy for Plant Conservation 2011 – 2020 (2010) – Target 9 of 16
Target 9: 70 per cent of the genetic diversity of crops including their wild relatives and other socio-economically valuable plant species conserved, while respecting, preserving and maintaining associated indigenous and local knowledge.
- UN Sustainable Development Goals highlighted the need of eradicating extreme poverty and hunger = Goal 1, 2 and 3, but particularly 2.5



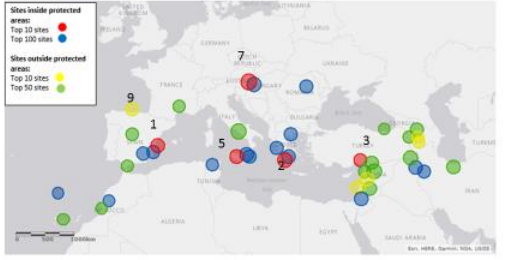




Vicia faba formosa: CWR of garden pea



European CWR Conservation



Top 45 out of 150 global *in situ* CWR conservation are found in Europe (Vincent *et al.*, 2018).




ECPR Wild Species Conservation WG



Major achievements since 2000:

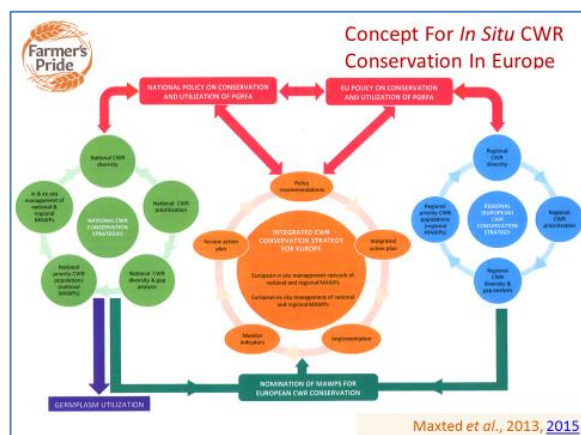
- Raising professional and public awareness
- Specific projects
 - PGR Forum
 - AEGRO
 - PGR Secure
- Publication of methodologies
- Concept (and background document): *ECPR Concept for In situ Conservation of crop wild relatives in Europe*
- Establishment of a community of experts





Concept For In Situ CWR and On-farm LR Conservation In Europe





European Parliament's Committee on Agriculture and Rural Development: Outcome

Provision of a **governance** structure:
 "The coordinating agency would have management and coordination responsibility for the **virtual network** and would need to: (i) ensure that the minimum criteria for inclusion in the global network are met; (ii) provide necessary training and expertise in *in situ* conservation; (iii) promote access to *in situ* conserved populations linked to benefit sharing; (iv) **increase awareness** of the value of CWR for agriculture and the environment; and (v) work with **national PGRFA coordinators** to nominate and maintain healthy CWR populations within the network



<http://web.ep.streamovations.be/index.php/event/stream/171207-1400-committee-agri>



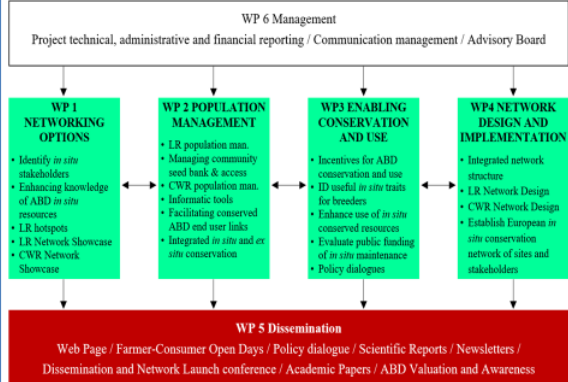
The Eurosite option?

- **Joint Annual Meeting:** CEEweb Academy in collaboration with Eurosite and EKLIPSE, Budapest, Hungary 25-27th September 2018
- **Mutually beneficial collaboration:** bridging the Protected Area / Agrobiodiversity divide?



Networking, partnerships and tools to enhance *in situ* conservation of European plant genetic resources

Enhance and promote the *in situ* management, conservation and use of plant genetic resources in Europe to provide greater diversity for food, nutrition and economic security



Establishing a European network for *in situ* conservation of plant genetic resources



- Improving knowledge of the roles and interests of **people** and **organizations** involved in PGR conservation and use *in situ*
- Establishing a communication platform to enable **knowledge sharing** and foster multi-actor partnerships
- Identifying **locations** where PGR populations are managed according to agreed practices and designating them as the first sites of the European network
- Building a **European network governance** structure using existing organizations with mandates to conserve PGR *in situ*



Improving and promoting best practices



- Improving knowledge of **PGR population management** *in situ*
- Showcasing how ***ex situ*** and ***in situ*** conservation can be integrated
- Creating **tools** to manage information associated with PGR conservation *in situ*
- Testing and refining **guidelines** for community seed bank management



Enhancing the use of *in situ* conserved PGR



- Promoting and **facilitating access** to *in situ* conserved diversity
- Engaging with plant breeders, farmers and other users of PGR to determine **which traits** are likely to be most important to meet future agricultural and market needs
- Undertaking analyses to **predict** which populations are most likely to contain these traits to prioritize them for conservation action
- Creating stronger and long-lasting **local, national and international seed networks**



Influencing the policy environment



- Investigating the suitability of the **current policy environment** to support the European network governance structure
- Identifying **cost-effective strategies** and policies to improve the PGR conservation and use system in Europe
- Improving our understanding of the **public and private benefits** associated with PGR conservation and use
- Identifying **gaps and needs for policy change** and establishing a dialogue to communicate recommendations to policy-makers



Collaborators



- 19 partner organizations representing the diverse PGR stakeholder community – farmer, agrobiodiversity, conservation and civil society NGOs; plant breeding/seed sector; public research institutes; protected area networks
- Farmer's Pride Ambassadors – to extend the geographical and stakeholder reach of the project and increase the range of expertise
- External Advisory Board – to review and evaluate project progress and outputs, and provide advice and guidance



Workshops and conference



- Three international stakeholder workshops for discussion and decision-making on the development of the European network and all related project activities
- Other workshops to deliver project deliverables
- Policy dialogue workshop
- Final dissemination conference



D3.1 Analysis of effectiveness of in situ support mechanisms: Orkney

- Bere (*Hordeum vulgare*) is still grown in significant numbers, but is decreased over time. Continued growth can be attributed to efforts of Orkney College and The Heritage Trust who provide seed to growers and store, save, or use the product.
- Of growers interviewed, 31.5% (5 of 16) had stopped growing one or more landrace in the last 15 years. Reasons cited were lack of support, uncertainty in the face of Brexit, and climate change.
- Landraces still grown included Bere, Black Oats (*Avena strigosa*), and a variety of traditional potatoes, turnips, and carrots (the latter three grown only by hobbyists)



Peter Martin's LR collection



Heritage Trust



Scottish island LR: Threats, erosion and fragility

- Grazing by residential geese on the Outer Hebrides mean almost all machair-based seed production is halted. Likely impact on genetic diversity and future of the landrace in the long term
- More severe weather than seen on the mainland was commonly cited as a problem on all three archipelagos, particularly Orkney and Shetland.
- Economic viability of crofting in fragile island economies were mentioned by many crofters in interviews 2018. Agri-environmental schemes are not reaching small-scale growers (Jones 2018). Island subsistence farming is no longer viable, growers reliant on additional 9-5 jobs and hobby crofters.
- Next generation - There are widespread concerns about access to crofting for young persons, related to wider issues of finance, lack of local employment and housing. On Orkney and Shetland there was also a lack of interest in crofting from the younger community.
- Orkney College and The Heritage Trust



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GenRes Bridge

GenRes Bridge Call

HORIZON 2020 – SFS – 28A [2018] Joining forces for GenRes and biodiversity management (CSA)

Specific Challenge:

"Activities will provide a framework in which the existing mosaic of European, national/regional structures can join forces to develop and implement ambitious approaches and strategies for the management of crop, forest and animal GenRes. In addition to advancing individual roadmaps, inventories and information tools for crop, forest and animal GenRes, cooperation between the different communities shall foster GenRes conservation within a wider (agro) biodiversity context. Particular care shall be taken to building and widening capacities across Europe and neighbouring countries (including Mediterranean countries), exchanging best practices, harmonising standards as well as sharing resources and data."



GenRes Bridge

GenRes Bridge: Aims and Objectives

Name:

Joining forces for GenRes and biodiversity management

Aim:

GenRes Bridge aims at strengthening the conservation and sustainable use of GenRes in Europe by:

- accelerating collaborative efforts among crop, forest and animal GenRes networks and wider (agro) biodiversity stakeholders
- widening individual network capacities to enhance the status and effectiveness of conservation and use of GenRes.
- increase the effectiveness of sustainable management for crop, forest and animal GenRes by developing a science-based, integrated GenRes Strategy and preparing policy recommendations
- widen capacities to increase the knowledge on conserved diversity of crop, forest and animal GenRes
- enhance the conservation status of GenRes
- improve the services



GenRes Bridge

GenRes Bridge Consortium

Nº	Participant organization name (acronym)	Country
1	European Forest Institute (EFI)	International
2	International Plant Genetic Resources Institute (IPGRI)	International
3	Univerza v Ljubljani (UL)	Slovenia
4	Gozdarski Institut Slovenije (GIS)	Slovenia
5	Norsk Institutt for Bioekonomi (NIBIO)	Norway
6	Stichting Wageningen Research (WR)	The Netherlands
7	Bundesanstalt für Landwirtschaft und Ernährung (BLE)	Germany
8	Luonnonvarakeskus (Luke)	Finland
9	Botanic Gardens Conservation International lbg (BGCI)	UK
10	Institut national de la recherche agronomique (INRA)	France
11	Università degli studi di Padova (UNIPD)	Italy
12	The University of Birmingham (UOB)	UK
13	Izpalnitelna agencija po selekciji i reprodukciji v živilnovodstvu	Bulgaria
14	Leibniz-Institut fuer Pflanzengenetik und kulturpflanzenforschung	Germany
15	Université Saint-Joseph (USJ)	Lebanon
16	ProSpecieRara (PSR)	Switzerland

GenRes Bridge

GenRes Bridge: An Integrated Strategy for the Conservation and Use of crop, forest and animal genetic resources


Coordination and support action brings together ECPGR, EUFORGEN and ERFIP for the first time, alongside representative identified stakeholders and end-users from outside the networks, to develop a European Integrated Strategy for the Conservation and Use of crop, forest and animal genetic resources.



GenRes Bridge

GenRes Bridge: An Integrated Strategy for the Conservation and Use of crop, forest and animal genetic resources

Bottom-up and integrated




GenRes Bridge


GenRes Bridge: From Nation to Regional GR Conservation

National GR Strategy Structure

- Introduction
- Vision statement
- National GR checklist
- Diversity analysis of priority GR
- Gap analysis of priority GR
 - *In situ* gap analysis
 - *Ex situ* gap analysis
 - Climate change analysis
- GR utilization potential
- Monitoring GR diversity
- GR Policy Recommendations
- GR Action Plan



If the countries are to contribute it does require they having a PGR, FGR and AnGR Strategies?




An opportunity to make a difference

Welcome to Farmer's Pride Ambassadors, External Advisory Board and consortium members

Most of us know each other well and have been collaborating for years in discussion of *in situ* PGRFA conservation

A 'jolly' for a group of friends at EU expense?

D4.4 European <i>in situ</i> conservation network of sites/stakeholders	UOB	PU	36
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ANNEX 3. WORKSHOP OVERVIEW



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Workshop 1 Overview

Shelagh Kell, University of Birmingham

Farmer's Pride Workshop 1
Helsingør, Denmark, 23–24 October 2018







Workshop participants

Three international stakeholder workshops for discussion and decision-making on the development of the European network and all related project activities

- Farmer's Pride Ambassadors
- Farmer's Pride External Advisory Board
- Nordic CWR project partners
- Dyniversity project representatives
- Other invited experts
- Farmer's Pride project partners



International stakeholder workshops x 3

DK 23–24 Oct 2018

Establish the foundations for the network

- Define stakeholders' roles and needs
- Review and elaborate network processes and practices
- Identify governance and policy requirements

GR 8–9 Oct 2019


Define the structure & management of the network

- Agree on methods for identifying network populations/sites
- Review management guidelines (populations, seed systems)
- Evaluate tools and mechanisms for network operation


PT Sep/Oct 2020

Network launch and policy dialogue

- Launch and promote the European network
- Convene a high level policy dialogue workshop
- Develop a roadmap for sustaining the network





Towards a European *in situ* PGR network



Stakeholders, organizations, populations, networks, processes, practices, policies....

An integrated network for *in situ* PGR conservation and sustainable use in Europe





Workshop 1 structure

Session 1
Network stakeholders

Define the network stakeholders, their roles, interests and needs, and how they will benefit from the network. Explore linkages, common interests, and options for integrating local, national and international stakeholders.


Session 2
Network operation

Identify requirements regarding the structure and practical operation of the European network, including how to nominate populations for inclusion and how to enable access to the diversity conserved *in situ*.

Session 3
Network governance & policy


Clarify the governance structure and functions of the network. Identify the policies relevant to its establishment and long-term operation, and needs for policy change.

ROADMAP FOR NEXT STEPS




Working groups

- Participants split into working groups to address the specific objectives of the workshop as detailed in the WG schedule and working documents.
- WG convenors are partners in the Farmer's Pride project who are leading related tasks of the project work programme.
- Each WG will be led by a chair, and a rapporteur will be responsible for recording the main outcomes of the discussions and for reporting in the plenary sessions.



Working group reports

- A summary of the discussions and main outcomes
- A list of clearly defined essential actions
- A timeline and agreed responsibilities for next steps
- A statement of policy needs to support the actions
- An outline of communication needs and main messages



Working groups

Session 1

- 1A: CWR conservation network stakeholders
- 1B: LR conservation network stakeholders
- 1C: PGR user network stakeholders

Session 2

- 2A: Network structure and best practices
- 2B: Strengthening and integrating seed networks
- 2C: Promoting and enabling use of material conserved *in situ* in the network

Session 3

- 3A: Network governance and operationalization
- 3B: The policy environment for network governance and operationalization



Working group convenors



José Iriondo



Nigel Maxted



Valeria Negri



Lorenzo Raggi



Béla Bartha



Theo van Hintum



Ben McCarthy



Adam Drucker



Documents & logistics

- List of documents in the working group schedule
- WG working documents according to WG allocations
- Room allocations per group, subgroups and sub-subgroups
- Map of room locations
- Coffee/tea on tap and can be taken into meeting rooms
- Lunches in Salen Marienlyst
- Group photo before lunch in Frederik VIII's Sal!!



Social events

- **Tuesday:** International Food Party, Seapoint, 19:00–22:00
- **Wednesday:** Tour of Kronborg Castle & visit to Helsingør Street Food Market



Workshop organizers/facilitators



Gert Poulsen




Shelagh Kell




Jenny Hawley



ANNEX 4. CWR CONSERVATION NETWORK STAKEHOLDERS



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**Farmer's Pride Workshop1
Session 1, Working group 1a:**

**CROP WILD RELATIVE CONSERVATION
NETWORK STAKEHOLDERS**

Convenors: José M. Iriondo & Nigel Maxted
Chairs: Lothar Frese & Anna Palmé
Rapporteurs: Parthenopi Ralli & Heli Fitzgerald





Objectives

General:
To identify the stakeholders of the European crop wild relative (CWR) conservation network

Specific:

- 1) Review the roles and interests of the people and organizations involved in *in situ* CWR conservation
- 2) Agree on the stakeholder groups involved in CWR conservation that will be part of the network
- 3) Define the specific roles/functions and/or interests/needs of the potential members within each group
- 4) Elucidate the benefits that each stakeholder group will gain from being part of the network
- 5) Identify linkages (existing or potential) and common interests between stakeholder groups
- 6) Explore options/mechanisms for integrating national and local stakeholders into an European network



Knowledge and actions we have to build on

Necessity of establishing global, regional and national networks for *in situ* CWR conservation (FAO, 2013)

Establishment of such networks (FAO, 2011)

- Support coordination of effort
- Provide methodologies/tools to support implementation
- Help raise resources for implementation and management
- Create greater awareness of the value and necessity of *in situ* conservation of agrobiodiversity



Knowledge and actions we have to build on

CWR network: could rely to a great extent on the infrastructure already built to conserve biodiversity and natural habitats and become operational in a quick efficient way.


RELATED GLOBAL NETWORKS	RELATED REGIONAL OR NATIONAL NETWORKS	ANTHROPOGENIC ENVIRONMENTS
<ul style="list-style-type: none"> • FAO Globally Important Agricultural Heritage Systems • UNESCO Man and Biosphere • UNESCO World Heritage Sites • CBD Programme of Work on Protected Areas • IUCN Crop Wild Relative Specialist Group • IUCN Key Biodiversity Areas • Plantlife Important Plant Areas 	<ul style="list-style-type: none"> • ECPGR Wild Species Conservation in Genetic Reserves Working Group • Natura 2000 Network • EUROPARC Federation • National plant genetic resource networks • National protected area networks 	<ul style="list-style-type: none"> • Farmlands • Roadsides • Peri-urban areas Etc



Knowledge and actions we have to build on

Other global conservation organizations may also be interested in collaboration on *in situ* CWR conservation in Europe:

- International Treaty on Plant Genetic Resource for Food and Agriculture (ITPGRFA)
- FAO Commission on Genetic Resources for Food and Agriculture
- Research centres of the Consultative Group on International Agricultural Research (CGIAR) (particularly Bioversity International)
- Global Crop Diversity Trust

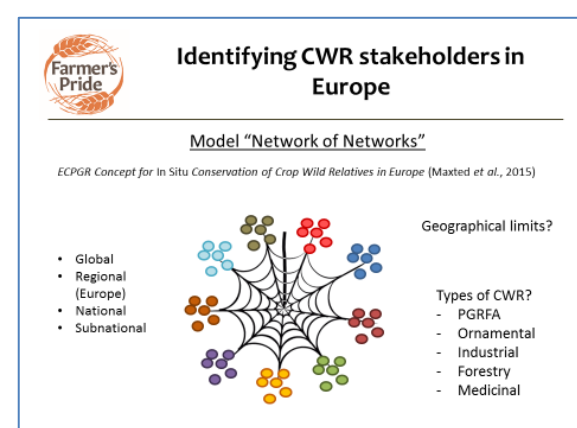


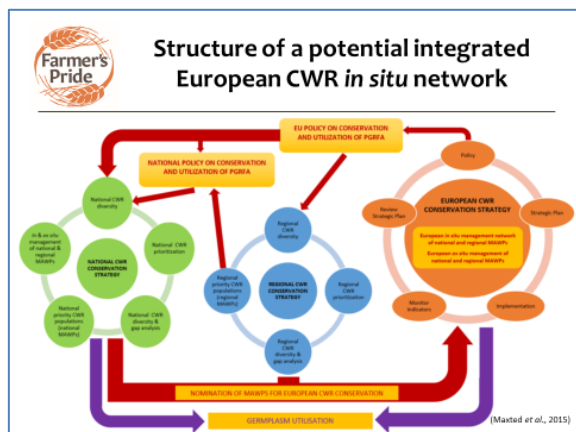
Identifying CWR stakeholders in Europe

CWR European network entails

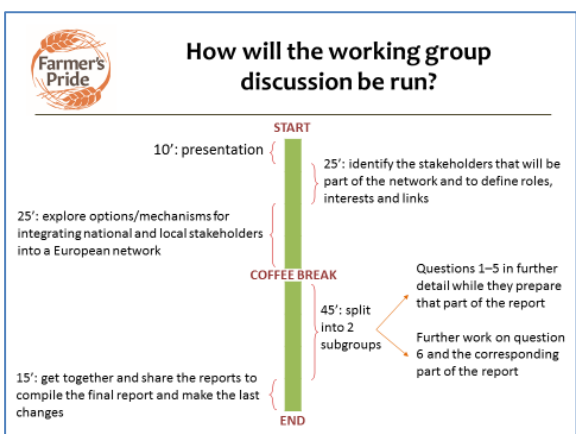
- Set of sites with selected CWR populations for *in situ* conservation
- Structure and organizational framework
- Governance system

Wide array of interest groups





-
- ### Specific questions to address
1. **Who will be involved** in the European PGR conservation and sustainable use network?
 2. Do they encompass CWR site stakeholders only or all stakeholders with an interest in CWR *in situ* conservation?
 3. What are their **roles, interests and needs**?
 4. How will they **benefit** from being part of the network?
 5. What are the **linkages and common interests** between stakeholder groups?
 6. How can we ensure PGR germplasm **user stakeholders** are involved in the network, given that we are conserving for use?
 7. Which are the best options/mechanisms for **integrating national and local stakeholders** into a European network?



ANNEX 5. WORKSHOP 1: ROADMAP FOR NEXT STEPS



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Workshop 1 Roadmap for next steps

Shelagh Kell and all Farmer's Pride collaborators
Farmer's Pride Workshop 1
Helsingør, Denmark, 23–24 October 2018





Specific actions arising from WGs



WG1A

- Jose will prepare a detailed report and circulate within the WG for comment
- Nigel to lead a SWOT analysis of CWR conservation stakeholders' involvement in the network
- Reports published online by January


WG2A (CWR)

- Eurosite and Chair of ECPGR Wild Species Conservation WG to meet with DG Environment to discuss CWR conservation in the Natura 2000 Network
- December

WG2A (LR)

- Task Force led by Ana Maria Barata to develop guidelines for inclusion of LR in the European network
- Will involve consultation between workshop participants and farmers/farmers' associations


Specific actions arising from WGs



WG3A (CWR)

- Review of governance structures of related organizations
- Draft governance structure for circulation and comment

General post-workshop actions



Participant evaluation

Workshop organizers will collate feedback and report to Farmer's Pride consortium


Project consortium meeting

Lessons learnt from Workshop 1 will be discussed at the consortium meeting

Workshop report

A report of the workshop will be prepared and shared for comment (16 Nov for feedback by 30 Nov)

Between now and Workshop 2



Project tasks

- Outcomes of the workshop will inform on-going tasks in the project
- Continuous dialogue with FPAs, EAB and other involved experts

Workshop 2

- Planning during summer 2019
- Involve FPAs, EAB and other involved experts in planning
- Week beginning 07 Oct 2019, Greece
- Possibly over 2.5 days??

Advocacy

- Presence of project collaborators at key meetings to promote the importance of PGR and the European network

