BMEL/BLE vision for a framework for on farm management in Germany

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Workshop of the Activity Grape On Farm
„On-farm inventory of minor grape varieties in the European Vitis Database“
10th October 2017, Geilweilerhof, Siebeldingen, Germany
Overview

→ On farm Management (OFM) in Germany

• Definition and situation

• Current political and legal framework

• Vision of the German Ministery for Food and Agriculture (BMEL) and the German Federal Office for Agriculture and Food (BLE)

• Concept aiming on fostering Competence Centres and the OFM networking

• Survey done by BLE-IBV: OFM in German Länder

• Innovative Funding of OFM

• Conclusion
### Definition of on farm management in Germany

**On-farm management**, as a special form of in situ conservation, is the conservation and further development of locally or regionally-adapted so-called “regional varieties”, in the environment in which they have developed their particular characteristics. – BLE Red List of Endangered Crop varieties
Situation of on farm management in Germany (1)

→ Due to a reinforced **specialisation** and **intensification** in the post Second World War period, the number of cultivated species declined considerably.

→ Approximately, 48 % of the German land area is used by agriculture with over 60 % of the arable land **dominated by 5 crops**.

→ The agricultural production is **dominated by modern high-yielding varieties**.

→ **Landraces are almost non-existent** with the exception of some fruits, vegetables and cereal varieties.

→ For important agricultural crops part of the disappearing diversity is safeguarded via **ex situ conservation** in genebanks. For many other crops the disappearance of varieties in cultivation implies the **irrecoverably lost of genes, gene combinations and therefore of genetic diversity**.

Source: Statistisches Bundesamt 2010
Situation of on farm management in Germany (2)

→ Quite a number of private and public institutions and non-governmental organisations (NGOs) in Germany are aiming at conserving and improving the diversity of landraces,

→ but they have a lack of financial and personal resources.

→ Fragmented responsibilities and abilities although OFM networking within BEKO

→ BMEL/BLE for On farm projects in the recent years.

→ Seed legislation for grape for OFM to be further developed

→ One of the central problem of on farm management in Germany is the production of seed and plant material for on-farm management (phytosanitary status!).
Political framework for on farm management in Germany (1)
Political framework (2)

Aims of on farm management in Germany:

→ Increasing diversity of species,
→ Increasing diversity of varieties among neglected cultivated plants,
→ Increasing genetic diversity,
→ The conservation of historically significant cultivated plants and forms of resource management,
→ The dissemination and cultivation of knowledge and practical skills,
→ The conservation of niche markets for regional products.
Political framework for PGRFA in Germany (3)

- Federal Ministry of Food and Agriculture
  - Advisory and Coordinating Committee for Agricultural and Horticultural Plants (BEKO)
    - Secretariat
    - PGRDEU
    - Coordination + information

- National Programme for the Conservation and Sustainable Use of Plant Genetic Resources of Agricultural and Horticultural Crops

- Project funding
A total of 345,977 plants were inspected

- 351 varieties were found
  - 242 varieties which existed before 1910
- Almost all of the varieties could be identified by ampelographically defined variety names
- National survey that covers the exact proportions of the grapevine varieties in the historically mixed vineyards of the various wine regions.
- The results of the survey are documented in the national inventory for plant genetic resources in Germany (PGRDEU):
  - https://pgrdeu.genres.de/onfarm/reben?lang=en
- Many of the varieties are ex situ conserved in the German Genebank for Grapevine.
- The survey was funded by the Ministry of Food, Agriculture and Consumer Protection (BMELV) and managed by the Federal Office for Agriculture and Food (BLE).
Examples of grape projects funded by BMEL (2)

→ FKZ 11NA014: „Development of knowledge transfer and information systems for the sustainable use of genetic resources” (01.01.2014 - 31.12.2016)
   (Weiterentwicklung von Wissenstransfer- und Informationssystemen zur nachhaltigen Nutzung rebengenetischer Ressourcen)

→ 10BM010 (-026, -028, -029, 030): „Conservation of genetic resources of Vitis vinifera L. by innovative, sustainable use of historical varieties in the wine-growing regions of Saale-Unstrut and Saxony” (23.07.2012 – 30.06.2015)
   (Erhaltung genetischer Ressourcen von Vitis vinifera L. durch innovative, nachhaltige Nutzung historischer Sorten in den Weinbaugebieten Saale-Unstrut und Sachsen)

→ FKZ 10OE067: „Use of genetic resources of the European wild grape for the breeding of mildew and black rot resistant vines” (01.08.2011 – 31.10.2016)
   (Nutzung genetischer Ressourcen der Europäischen Wildrebe für die Züchtung von Mehltau- und Schwarzfäule-resistenten Reben)
Legal situation of on farm management in Germany

→ In the context of the seed marketing act, it was difficult to commercially market seed from old plant varieties
  • These varieties were not able to fulfil the exacting requirements of registration testing (distinctness, uniformity and stability)
  • Therefore the EU regulation on conservation and amateur varieties were conducted – implemented in German law in December 2010
  ▪ The EU regulation does not apply to vines
    ▪ Although the vine planting directive 68/193/EEC provides in its Article 3 (2), first sentence, point (c), that varietal material intended for measures for the conservation of genetic diversity are allowed to be marketed by derogation from the otherwise stricter standards of the directive.
    ▪ However, pursuant to the second sentence of Article 3 (2) of the abovementioned Directive, the conditions under which this is possible are laid down by the procedure of the Standing Committee on Seeds of the EU.
      » Until now the Committee has it not been included in its work program.
Vision for on farm management of the German ministry for food and agriculture (BMEL) and the German federal office for agriculture and food (BLE)

→ BMEL was asked by a committee of the „German Länder“ (Amtschefkonferenz ACK)

→ Development of Concept for On-farm Management by BMEL/BLE ongoing process

→ National Programme PGR as a base for further development of On farm structures

→ Networking of IBV, Regional National Competence centers and Stakeholders

→ Innovative funding mechanism „GAK“ and project funds.
Vision: Concept for competence centres for OFM (1)

- Coordination and information
- National inventory PGRDEU, red list
- Integration in national and international processes

Regional competence centres

Competence: Information about cultivated plants, guidance; training
Networking of actors: private / public; ex situ / on farm; Agriculture / Environment

Support measures along the value chain
Seeds and planting material/
Breeding (conserving) ➔ Seed multiplication ➔ Cultivation ➔ Trade ➔ Consumer
What is understood in this context as a competence center?(2) – List of functions for supporting OFM

→ the provision of information on rare, regional species and varieties,
→ the provision of seed and planting material of suitable varieties,
→ the organization of the seed multiplication,
→ the offer of education for on-farm-management and training in the field,
→ the support for the development of marketing concepts,
→ support for the establishment of networks of stakeholders interested in on-farm management;
→ the consultation of stakeholders regarding the legal conditions and funding possibilities.
Results of the survey of the Federal states / “German Länder” (3)

→ Number of on farm stakeholders and

→ Number of (regional) on farm competence centres
Results of the survey of the Federal states (4)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Promotion in the Federal states</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td>47 %</td>
</tr>
<tr>
<td>Cereals</td>
<td>33 %</td>
</tr>
<tr>
<td>Vegetables</td>
<td>27 %</td>
</tr>
<tr>
<td><strong>Grape vine</strong></td>
<td><strong>27 %</strong></td>
</tr>
<tr>
<td>Ornamental plants</td>
<td>27 %</td>
</tr>
<tr>
<td>Medicinal and aromatic plants</td>
<td>13 %</td>
</tr>
<tr>
<td>Grass land</td>
<td>7 %</td>
</tr>
<tr>
<td>Others</td>
<td>13 %</td>
</tr>
</tbody>
</table>
Vision for a innovative funding of OFM (1)

Promotion of on farm management in Germany with financial resources from the Germany + Länder within ELER framework „GAK“

Joint German Government and Länder Programme on Improving Agriculture Structures and Coastal Protection

Key element of the National Strategy for the Development of Rural Areas
1.1 New federal policy framework (GAK) in discussion - ELER

→ innovative instrument for the promotion of regional competence centers for on-farm-conservation under the umbrella of BLE-IBV (Data recipient).

1.2 Funding proposed for

- A) In-situ and on-farm conservation
- B) Ex situ conservation
- C) Collection, characterization, evaluation and use
- D) the creation and maintenance of online directories of resources obtained from in situ, on-farm and ex-situ
- E) exchange of information between stakeholders on conservation, collection, characterization, evaluation and use
- F) information, dissemination and consultancy activities, training and preparation of technical reports
- G) elaboration of concepts relating to the measures referred to in (a) to (f)
Proposal GAK formulation (On farm data) (3)

1.5 Funding conditions

→ 1.5.1 The measure serves for the **implementation of the National Programme** for the Conservation and Sustainable Use of Genetic Resources of Agricultural and Horticultural Crops.

→ 1.5.2 The measure must be related to indigenous and endangered plant genetic resources (cultivated plants and related wild species) which are:

- **not protected** under Plant Breeders’ Rights and registered for National List, with the exception of varieties which are registered as conservation and amateur varieties
- regionally, historically, or culturally important and
- endangered.

→ The Federal Office for Agriculture and Food (BLE) provides decision support in the form of red lists of endangered crop plants and other data collections.
1.6 Other provisions

→ The Laender report a list of funded PGR to the BLE. Recipients are required to report collection, characterization and evaluation data to the central register for on farm and in situ at the BLE and to the National Inventory (ex situ).

→ Funding for farmers, other land users, Non-profit legal persons and villages /cities so far foreseen in the current GAK proposal
Conclusion and next steps

→ New GAK Measure G 1.0 for PGR should become the Central and innovative instrument for the promotion of regional competence centers and stakeholders of on-farm-conservation.

→ Meeting with German Länder delegates and OFM-experts in November 2017 to clarify administrative and legal issues

→ BLE provide platform for the development of blueprints for GAK-funding (value chain, C&E) and for legal questions

→ BMEL will soon present the On farm concept and with an attachment “GAK measure G 1.0 for PGR” as an innovative funding instrument to ACK-Committee

→ Voluntary programming of German Länder
Further information

→ Interested in further information? Questions?
  • Please do not hesitate to ask us!
    ▪ Information and Coordination Centre for Biological Diversity
      ▪ Information system for genetic resources: http://www.genres.de/?L=3
      ▪ National Inventory for Plant Genetic Resources: http://pgrdeu.genres.de/index
Thank you for your attention!