



FarmSeedOpportunities

Opportunities for farm seed conservation, breeding and production

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Specific Targeted Research project

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Thematic Priority 8.1

Specific Support to Policies

Deliverable D1.1

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Dissemination Level	
PU Public	
PP Restricted to other programme participants (including the Commission Services)	X
RE Restricted to a group specified by the consortium (including the Commission Services)	
CO Confidential, only for members of the consortium (including the Commission Services)	



Introduction

In WP1 we will determine the various stakeholder expectations on the use and marketing of landraces, conservation varieties and amateur varieties in Europe. We can distinguish several groups of stakeholders such as consumers/traders, farmers, (formal and farmer) breeders, *in-situ* and *ex-situ* gene banks, and policy makers. There are already some reports on surveys available in some countries that we will use. But we will also need additional surveys with more focussed questions that are in preparation for 2008. The outcome of the surveys will deliver a stakeholder overview and distillation of main questions, which can be input for a European workshop, including also other countries not involved as partners, such as Scandinavian countries, Baltic States, and other Eastern Europe countries (Poland, Slovenia, Hungary and Romania).

Under the expectations lie different definitions or interpretations of the concept of land races, conservation varieties and amateur varieties among different stakeholders in different countries and/or regions. Possibilities for marketing of other varieties not included in these specific seeds will also be mapped. It is important to map and clarify those differences in interpretations and to identify conflicting areas between current practices and current (draft) regulations. Many initiatives have experienced constraints in meeting policy maker requirements on regulations and legislative affairs. We will analyse the current discussions at the European level and in European countries regarding the marketing of seeds of landraces and will bring that together in a report on match and mismatch of expectations to the (draft) regulation text of Directive on conservation varieties.

In 2007 we have mainly focussed on methodological aspects to involve most of the partners.



Task 1.1: Definitions of landraces, conservation varieties, amateur varieties in Europe (M1–M24) (Leader: Véronique Chable, INRA)

Partners: AIAB, FiBL, INRA, LBI, PRI, RAS, RSP, DLO

Main methods: Desk studies, in depth survey

Aims (as in the workpackages description)

In this task the different (interpretations of the) definitions of concept of landraces, conservation varieties and amateur varieties among different stakeholders in different countries and/or regions will be mapped and investigated. Possibilities for marketing of other varieties not included in these specific seeds will also be mapped. This will be done by literature research, and through case studies of current practices, and through in depth surveys in 5 areas of Europe (NL, I, F, S, CH).

Task 1.1 will

- report on the “variability” of the local definitions and the matched habit or laws/regulations
- specify the notion of the concept of local adaptation
- specify the notion of varieties threatened by genetic erosion (with a historical approach, mentioning the genetic resources stocks, and analyses of their interest compared to the *in situ* variability

Evolution since the DoW

During our annual meeting (M10) in Vicenza: we have to emphasize the variability of the definitions according to the points of view.

Hungary and Romania will be integrated for our European analysis.

Methodologies and steps

- Introduction of a « participatory method » to propose definitions
- Literature review
- Analysis of surveys about European experiences (farmers, researchers ...)
- Crossing the three approaches

➤ **Steps**

1. Definitions of methodologies for deliverable D1.1 (December 2007)
2. List of words and expressions to define (November-December 2007)
3. Submit the outlines of the definitions to debate (December-June) (forum proposed by Michel Pimbert)
4. Elaborating a sheet for each experiences through survey or literature review (December - February)
5. First report in February for the WP4 starting meeting in Florence
6. Final report, « scientific publication » (December 2008)

➤ **Definition of methodologies**

The idea is to cross the points of view and their definitions. So the most actors will be solicited. Several approaches will be performed:

- *Introduction of a « participatory method » by a forum*



A web forum has been proposed to get a broader participation and enlarge the point of view, mainly toward the users of cultivated biodiversity. Some elements from literature review will be brought to initiate the debate for all the concerned concepts.

- *Literature review*
Several scientific and experts will be contacted
- *Analysis of surveys about European experiences (farmers, researchers ...)*

➤ **Concepts to be defined**

A first list of the terms to be discussed and defined has been established as followed:

- *Types of varieties;*
Landraces, conservation varieties, amateur varieties, peasant varieties, farmer varieties, and varieties adapted to organic farming
- *Management of the varieties*
Conservation, dynamic management, renewing, ...of biodiversity
- *Breeding the varieties*
Participatory breeding, peasant breeding, organic breeding
- *Market*
Marketing, commercial exchange, free exchange

This list will be completed during the second year by a participatory process and thanks to the interaction with the two other tasks.

➤ **Organisation of the forum**

Michel Pimbert (IEED) proposed a web link use for the e-discussion <http://www.dgroups.org/>.

It will be integrated into the farm seed opportunities web site.

The link has to be established by the partners in charge of the web site from WP4.

An initial document will be proposed to initiate the debate as in the example in appendix 1 for “landraces”.

➤ **Sheet for each experiences from survey or literature review**

From the experiences in different countries and regulation systems, it will raise several concrete situations which might enrich the concepts. This work will focus on the concrete and current aspects of the varieties for which the common trait is not to be registered.

The idea is also to collect information to describe as far as possible the current state of the varieties previously designated as landraces, conservation varieties and amateur varieties.

➤ **First report in February for the WP4 starting meeting**

The starting meeting WP4 will be held at the end of February. One concerned task deal with the elaboration of the regulation scenarios. An important part of the legislative work concerns the definition of the concepts. An interim report of the task 1.1 will help to the organisation of the studies of T4.2. It will be mainly elaborated from the literature review, expert contacts and the first analysis of the forum and experiences analysis.

➤ **Final report and « scientific publication »**

The final report will probably bring matters to elaborate a scientific publication. Its originality will be to confront a multidisciplinary approach of the different concepts.



Task 1.2: Characterisation of stakeholder expectations (M1 – M24) **(Leader: Dr. Andreas Thommen, FiBL)**

Partners: AIAB, FiBL, LBI, PRI, RAS, RSP, WU, PRI, DLO

Main methods: Workshop, desk studies, surveys

Aims (as in the workpackages description)

- Provide an overview of stakeholders related to the topic of the project
- Report on stakeholder expectations of bringing biodiversity to the market / niche markets; including added value and volume.
- Report on stakeholder point of views on ethical aspects of breeding methods (gmo, hybrids versus open pollinated varieties, etc.)

Idea

The idea of the WP is to track the expectations of the stakeholders along the “production chain” of typical heritage products. All the groups of stakeholders, categorised below, have their own point view and other expectations regarding the performance of a crop. Of course the different stakeholder can be united in one person, farmers how sell directly products made from traditional varieties. But even then, we can try to highlight the different optics.

Planned steps

1. Overview and grouping of stakeholders
2. Categorisation of stakeholders expectations
3. Inventory of marketing initiatives (survey done by project partners)
4. Literature review: case studies of production and marketing initiatives
5. Questionnaire for expert interviews (supplemented with interviews)
6. Expert meeting in Switzerland
7. Conclusions and reporting (handbook?)

Open Questions

- Do we integrate also “failures – bad examples”?
- Shall we highlight the financing aspects of initiatives like public funding etc.?

1. Overview and grouping of stakeholders

The stakeholders related to the production and marketing of conservation varieties and landraces can be grouped as following:

1. Conservators and maintainers
2. Seed producers and breeders
3. Cultivators
4. Traders, warehouses and processors
5. Retailers
6. Buyers and consumers
7. Officials and formal seed market



➤ 1.1 Conservators and maintainers

The conservators and maintainers are the ones that care for the surviving of old and traditional cultivars and landraces because it is their job (as gene bank responsible) or because they keep up tradition of their farm or region. Traditionalists and professional conservators are often substantially supported by hobby gardeners and amateurs who build up private collections of varieties. In this WP this group is involved as source of conservation varieties and landraces. They can, but must not be part of a marketing project.

Main members of the group:

- traditional farmers and gardeners
- private variety collectors
- conservator of seed saver initiatives
- gene bank conservators

Examples from Switzerland:

- Hermann Röllin, Baar, farmer, traditional cherry planter
- Andreas Sprecher, teacher, tomato variety collector
- Fritz Brunner, gardener, fruit variety collector and variety determination expert
- Edelchrüsler Association (Basel fruit collection)

➤ 1.2 Seed producers and breeders

Seed producers and breeders can be either amateurs or professionals that pick up traditional cultivars and landraces and start medium and large scale seed production or try to improve the varieties by more or less intensive selection (of the accessions), maintenance and breeding programmes. Of course this group cannot be clearly separated from the traditionalist and seed savers above.

Main members of the group:

- Small and medium enterprise (SME) breeders
- Organic and biodynamic breeders
- Farmers breeders and farm seed cooperatives
- Participants of participative plant breeding programmes
- Skilled amateurs

Examples from Switzerland:

- Sativa Rheinau, biodynamic breeders and seed producers
- Granalpin Association, cereal seed savers and promotion of alpine cereal products
- Interest group “Ur-Dinkel”, production and marketing of traditional Swiss spelt.

➤ 1.3 Cultivators

This category is responsible for the plant growing and crop production in small or large scale if it is not wild collection.

Main members of the group:

- Farmers
- Fruit-, wine- and vegetable-growers
- Farmer cooperatives
- Gardeners

➤ 1.4 Traders, warehouses and processors



Some varieties and products are not for fresh use, but have to be processed first. Other products will be regionally collected, stored and pass intermediate trade before they reach the retail market.

Main members of the group:

- Buying agents of food traders
- Warehouse keepers
- Technical managers of the processing industry and of handicraft enterprises, e. g. bakeries, winemakers, breweries, dried fruit companies etc.

➤ **1.5 Retailers**

The retailers encompass mainly small and medium enterprises, but also some departments of supermarkets, building up a market for conservation varieties and local products.

Main members of the group:

- Leaders of marketing initiatives
- Product managers
- Marketing specialists

➤ **1.6 Buyers and consumers**

The consumers, as well as responsible of restaurants and cantinas finally decide if conservation varieties and regional products are profitable on the market.

Main members of the group:

- restaurateurs
- buying agents of cantinas
- cooks
- consumers

➤ **1.7 Officials and formal seed market**

As a fourth category of stakeholders, we have to integrate policy makers and representatives of the formal seed producers and breeders. They may be positively involved in the process by supporting and funding initiatives for the marketing of conservation varieties, but can also act as opponents.

Main members of the group:

- Representatives of the National Action Plan for Agricultural Biodiversity
- Officials of the Protected Designation of Origin (PDO) / Protected Geographical Indication (PGI) departments
- Representatives of the multinational seed and breeding industry

The following cases are proposed for in depth case studies:

- Pro Specie Rara Switzerland, labelled marketing of vegetables together with supermarket COOP
- Eosta The Netherlands, marketing of assorted tomato varieties in a basket

It is planned that we investigate about five to ten marketing projects, preferably one of all the member state and preferably also with different approaches (e.g. direct marketing versus retailers) and also different product classes (e.g. fresh product versus processed product) etc. to highlight all the advances and possible loopholes of the chosen strategies.



2. Categorisation of stakeholders expectations

As the stakeholders have been categorised, also the expectations of the stakeholders can be grouped in the same scheme. Since all the stakeholder categories have another point of view on the plant or product, also the stakeholder expectations must be grouped. According to this we propose separate the questions in the survey according to the stakeholder categories.

Table: main categories of stakeholders expectations

Stakeholder category	Main concern	Possible expectations regarding the plant or product
Conservators and maintainers	Conservation of plant genetic material	Biodiversity Rare (exclusive) varieties food and cultivation tradition landscape
Seed producers and breeders	Independence from seed industry marketing of seed	Niche varieties Profitable seed production
Cultivators	Plant cultivation and crop production	Crop management Robustness Crop yield Integration in the crop rotation
Traders, warehouses and processors	Niche products in sufficient quantity	Storability Uniformity Quantity Constant processing qualities
Retailers	Marketable product	Marketable product history Constant supply Exterior quality Shelf life
Buyers and consumers	Local, regional, or traditional specialities	Product history Exterior and interior quality Fair trade Product health and safety
Officials and formal seed sector	Abidance by the law Public welfare	Compliance with PGO laws, seed trade and variety protection laws and International treaties Business and regional development

3. Inventory of marketing initiatives

Survey done by project partners, combined with below

4. Literature review: case studies of production and marketing initiatives

Literature study should give an overview of all existing marketing initiatives in the states of the project partners. Therefore an inventory of all marketing initiatives should be made.

First of all we have to distinguish two main groups:

- 1) Marketing of seeds
- 2) Marketing of crops or processed products

The marketing initiatives could be categorised according to the used distribution channels (direct selling, box scheme, specialist shop, supermarket etc.)



The project partners should provide us with the necessary information and contacts.

5. Questionnaire for expert interviews

It is planned to enrich the literature review done in the case studies with a questionnaire adapted for all the different stakeholder categories. The questionnaire shall be supplemented with interviews with specialists of the different stakeholder groups.
The questionnaire is not yet set up.

6. Expert meeting in Switzerland

In autumn 2008 the studies of WP 1.2 so far will be presented at an expert meeting to be discussed and further elaborated. The conclusions of the expert meeting will also be integrated in the final publications.

7. Conclusions and reporting

It is thought to publish all the different works of WP 1.2 together with the other data of WP 1 in a common handbook.



Task 1.3: Constraints of policy-maker requirements (M1 – M24) (Leader: Dr. Niels Louwaars, WUR instead of Chris Kik, WUR)

Partners: AIAB, INRA, LBI, PRI, RAS, RSP, DLO

Main methods: desk studies

Aims (as in the workpackages description)

Task 1.3 will analyse the constraints of policy maker requirements. This regarding the marketing of seeds of landraces, conservation varieties and amateur varieties: current discussions on regulations and legislative affairs at the European level and in European countries.

Task 1.3 will:

- Report on analysis of DUS criteria
- Report on analysis of the different position from one country to another.
- Report on match and mismatch of outcomes from 1.1 and 1.2 to the (draft) regulation text of Directive

Evolution since the DoW

LBI (Edith Lammerts van Bueren) has discussed the steps with task leader Niels Louwaars-CGN) and gathered several documents of importance. We had a meeting with NL authorities representing NL in Brussels on the regulation for conservation varieties (Kees van Ettehoven) who cooperated with us to help to understand the different country opinions through out the process in Brussels

Methodologies

- Desk study

Steps

1. submit outlines of working plan (end of December 2007)
2. list of current relevant regulations on seed, on organic agriculture (EU 2092/91, organic seed (EC 1452/2003), and draft EU regulation text on conservations varieties (February 2008)
3. inventory of examples of conflict with DUS criteria and of examples of finding ways out from each partner (March 2008)
4. analysis of the different positions from one country to another (April).
5. first report in September 2008
6. final report scientific publication (December 2008)



Appendix 1

To define the landraces and farm/peasant/conservation ... varieties

➤ Introduction

To give basic information to everybody, you will find hereinafter the definitions found in the seed regulation and the “scientific” ones of landrace. These definitions seems linked to the point of view of the person who proposes it.

These varieties have a common characteristic: they are not “standardizable” and cannot fit to the standards of the current seed market. Elsewhere, the varieties have a common trait: the local adaptation. Thus, their attachment to the nature is thus recognized meanwhile the others have lost it. The paradox is that we have now to find a legal place to the “natural” process ...

This diversity of words to designate them is it a consequence of the different points of view?

- “peasant”, we recognize them to be the inheritance of a peasant activity in his country (pays, in French), thus man, land and culture are included in the notion;
- “farm”, the varieties could be an issue of the farm activity, included the agronomical techniques and the farm products characteristics;
- “conservation”, they give a good awareness to people who wish to keep in museum the inheritance of the ancestors.

Through these suggestions, you already guess one point of view which forgets all genetic notions and market values to the seed. It is written in a context which recognizes that “the seed is a gift”.

➤ “Rules of the game”

You are invited to suggest and to argument a way to designate the “non conventional” varieties. We have to find a consensus to designate in Europe the varieties of the farmers (peasants). In France, the “variété paysanne”(peasant variety) is the term currently used by the people involved in the peasant seed networks (Réseau Semences paysannes).

➤ Context

(from the “State of art” in the project Farm Seed Opportunities)

In 1998, for the first time, the European Directive 98/95/CE mentions the essentialness to ensure the conservation of genetic resources and the necessity to introduce a legal basis to that end to permit, within the framework of legislation on the seed trade, the conservation, by use *in situ*, of varieties threatened with genetic erosion. More recently, in 2005, the EU adopted a directive opening the possibility of a separate list for “conservation varieties”. Nevertheless, there remain several unclear conditions and definitions to find a consensus to the application of the 98/95 regulation, for example, about the definition of the conservation and amateur varieties, the notion of the region of adaptation and the threat of genetic erosion. In 2007, a new version has been voted in Brussels;



Preliminary information

➤ Landraces

98/95 EU directive (narrow definition)

“Landrace means a set of populations or clones of a plant species which are naturally adapted to the environmental conditions of their region”

1998 (Zeven): illustrates an **ecological / agronomical definition**

- “As a landrace has a complex and indefinable nature an all-embracing definition cannot be given. However, I suggest the following: an autochthonous landrace is a variety with a high capacity to tolerate biotic and abiotic stress, resulting in high yield stability and an intermediate yield level under a low input agricultural system.”

2005 (Villa *et al.*): introduced **historical and cultural aspects**

- “A landrace is a dynamic population(s) of a cultivated plant that has historical origin, distinct identity and lacks formal crop improvement, as well as often being genetically diverse, locally adapted and associated with traditional farming systems“.

2005 (Mutersbaugh): introduced an **economical dimension**

- Today, these varieties have acquired also an economical dimension, with the increasing market of “qualify-certified” products

2005 (Negri) introduced an **ethical value**

- One has to consider that these varieties are invested of an ethical value for a public considering the threatened biodiversity and the interest towards local development

References

- Mutersbaugh T. (2005) Just-in-space: certified rural products, labour and quality, and regulatory spaces. *Journal of rural studies* 21: 389-402.
- Negri V. (2005) Agro-biodiversity conservation in Europe: ethical issues. *Journal of Agricultural and Environment Ethics* 18: 3-25.
- Villa et al (2005) Defining and identifying crop landraces, *Plant genetics resources: characterization and utilization* (3): 373-384.
- Zeven AC (1998) Landraces: a review of definitions and classifications, *Euphytica* 104: 127-139

➤ Regulation about conservation varieties

Text of the regulation of 2007 (extracts)

Whereas:

- (2) “To conserve those resources, it is important to protect landraces and varieties which are naturally adapted to the local and regional conditions and threatened by genetic erosion. Such landraces and varieties should be grown and marketed even where they do not comply with the general requirements as regards the acceptance of varieties and the marketing of seed and seed potatoes. In order to achieve that objective it is necessary to provide for derogations as regards the acceptance of agricultural landraces and varieties, hereinafter: conservation varieties, for inclusion in the national catalogues of varieties of agricultural plant species as well as for the production and marketing of seed and seed potatoes of those varieties.”

Article 2 Definitions

For the purposes of this Directive the following definitions shall apply:

- (a) “conservation *in-situ*” means the conservation of genetic material in its natural surroundings and, in the case of cultivated plant species, in the farmed environment where they have developed their distinctive properties;



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- (b) “genetic erosion” means loss of genetic diversity between and within populations or varieties of the same species over time, or reduction of the genetic basis of a species due to human intervention or environmental change;
- (c) “landrace” means a set of populations or clones of a plant species which are naturally adapted to the environmental conditions of their region;
- (d) “seed” means seed and seed potatoes, unless seed potatoes are expressly excluded.

Véronique Chable, November 13th 2007

