



DYNIVERSITY

Pétanielle
(France)
Case study analysis

DYNAmic seed networks for managing European diversity:
conserving diversity *in situ* in agriculture and in the food chain



DYNIVERSITY project received funding from the European Union's Horizon 2020 Research and Innovation program under Grant Agreement n. 773814

PART 1: DESCRIPTION

1.1 Contextualising the case

Pétanielle is a French association based near Toulouse (in Occitania in the Tarn and Haute Garonne and extending its work to the neighbouring departments). This association brings together gardeners and farmers around "old" wheat varieties. Its origin dates back to 2009. Following a symposium on GMOs and biodiversity, gardeners and farmers met in an informal network. Their common desire was to promote conservation and develop bread-making cereals. This first network was called: "Growers of the biodiversity of gardens and fields". In 2011 this network became formalized and became Petanielle (in reference to a buckwheat variety from Nice). On the basis of the work started by a few farmers, the association now preserves and multiplies heritage crop varieties. Currently the association has about 150 gardeners and about thirty farmers. Together, they manage a collection of around 90 varieties of wheat.

The common objective of members is to provide access to alternatives to commercial agro-industrial seeds, "to enable farmers to regain their autonomy over seed and everyone to have access to quality products while reducing the effects on our environment." (website of the association).

The link between professionals (farmers) and amateurs (gardeners) is fundamental in the approach and the way the association operates. This brings producers and consumers closer together by giving gardeners an active role.

After a two-years' period with an employee, the association decided to return to a mode of functioning totally based on volunteering. What is fundamental for them is to be a group of citizens who share and manage a common resource.

Pétanielle, in its practices, is fully in line with the definition. The association is developing four actions that, together, allow the redeployment of "peasant seeds": safeguard, conservation, pre-multiplication and multiplication. The work is divided between gardeners and farmers.

1.2 « Doing »

1.2.1 Properties WITHIN the initiative (closure)

The members of the association talk about "peasant seeds". This term is part of the terminology used by the French Peasant Seed Network (Réseau Semences Paysannes - RSP) of which Pétanielle is a member. Since 2013, the RSP has defined "peasant seeds" as "seeds resulting from a landrace or a set of dynamic landrace populations reproducible by the farmer, selected and multiplied with methods respectful of the integrity of the plant cell in fields, gardens, or orchards managed in sustainable (organic or biodynamic) agriculture. These seeds are reproduced by successive multiplication allowing for free cross-pollination and if relevant, applying mass selection. They are freely exchangeable in accordance with the user rights defined by the communities that keep them alive" (RSP website).

The association obtains varieties from other farmers (in the region or elsewhere), as well as from the Biological Resources Centre for Straw Cereals (INRA de Clermont-Ferrand). Conservation is then about maintaining the Pétanielle collection. This work is carried out *in situ* by the gardeners. The task is organized in two complementary ways. On the one hand, gardeners distribute among themselves the varieties to be propagated. As a security back up measure, five or six gardeners multiply the same variety. In addition, the different conditions from one terroir to another (even if close) allow the expression and maintenance of the variety's full genetic potential. This conservation is carried out on 1 m² plots. For the past year, given the growing size of the collection, the association has decided that the entire *in situ* conservation would be carried out over two years. The involvement of gardeners is necessary for two reasons. On the one hand, gardeners have more time available than professionals. On the other hand, the necessary space within a garden is 1 m². Maintaining a variety in a vegetable garden does not require specific mechanization. The next step, pre-multiplication, is used to enable the association to carry out tests on the technological properties of the cereals (i.e. how they perform when processed into other products for human or animal consumption). This step allows to move from conservation over a few square meters to working in the fields. About twenty gardeners multiply the variety following in this step. Thus, this work produces the first stock (a few kilos) which allows the farmer to multiply it in order to test it. Since its foundation, Pétanielle has carried out this work for wheat varieties such as Gentil Rosso or a variety from Castelnau.

Finally, the most promising varieties are further multiplied on a larger scale by farmers. This task requires a serious commitment from the farmer, since she/he must multiply the pure variety over a minimum area of 3000 m². Farmers who make this commitment are known within the association as "peasant-multipliers" and "peasant-stewards". The farmer becomes the privileged observer of the variety. On the basis of his observations, he can start a selection, carry

out tests on bakery quality and follow the circulation of the seed of this variety in the network. The farmer signs the "stewardship and multiplication agreement" with the association. This agreement underlines the reciprocal commitments between the parties: Pétanielle commits to undertake the following tasks, as part of its programme to experiment and obtain observations on landraces, to :

- Make available a batch of grains for *in situ* conservation, multiplication and observation of the varieties (the seed lot reaches, when possible, a sufficient quantity to be sown on a plot of around half a hectare);
- Provide the observation sheets necessary for data collection;
- Ensure, at least, 2 annual visits of the crop in the presence of the farmer for exchanges and monitoring;
- Connect farmers who are experimenting (or have experimented) with the same variety;
- Seek solutions to help the steward in case of a crop or harvest problem, in particular by networking;
- Mobilize its network of gardeners to support evaluation, selection and harvesting operations if the need arises.

In return, the multiplier undertakes to:

- Sow the variety alone/pure, excluding any variety mixture. To this end, it is important to ensure that the sowing machine is emptied perfectly before sowing the variety and that a minimum spacing of 1 meter is left between adjacent varieties;
- Follow the harvesting protocol defined below to ensure no mixing occurs;
- Return the equivalent of the quantity received in a clean condition for sowing or increase by 10% if harvest is good;
- In return, make a batch of grain available to a new multiplier at the annual meeting;
- Inform Pétanielle of the availability of one or more additional lots in order to be able to follow the course of the variety;
- Keep Pétanielle informed in case of abandonment of the program or of desire to change the varieties;
- Refer to the association in case of any problem before using the harvest, to allow, if necessary, manual sampling or any other need.

All four steps (storage, conservation, pre-multiplication and multiplication) allow a variety to be reintroduced in use. At the end of all this work, over several years, Pétanielle is able to provide options to other farmers for diversifying their production and developing their own seed autonomy. During a farmer event called "the grain market", people who want to, can come and get their 50 kg bag of seeds for free. Pétanielle's idea is to spread biodiversity and allow seed autonomy. In exchange, Pétanielle asks farmers who receive the seeds, to bring back the same quantity the following year or more.

The objective of working with gardeners is more that of raising awareness on the importance of diversity and the necessity to contribute to its maintenance.

1.2.2 Properties BEYOND the initiative (outreach)

Seed circulation is free but must comply with the rules of use defined by the association. For farmers, it is necessary to sign the "stewardship and multiplication agreement" document. For gardeners, a document available on the website includes this commitment:

"By taking these few seeds and growing them in your garden, you are helping to preserve the biodiversity you grow by sharing a living collection. At the same time, you are part of a community whose common rule is to return part of the harvest in order to ensure the safety and redistribution of the variety. Thus, you undertake to take care of these few seeds and carry them through to harvest and to participate, according to your availability, in the collective maintenance work of the field collection for which the association's gardeners are responsible.

What matters to Pétanielle is that all the people who are committed to multiplying the seeds and who benefit from the collective work participate in collective, dynamic seed management activities. Consequently, within the collective management framework of a common resource, the circulation is free, and no appropriation is allowed.

1.2.3 Transformative effects beyond the initiative

The main way of transmitting the history of the varieties and the work they require is oral. During the transmission of the seed, the person who makes it available refers where he received it, when and the people involved in its conservation and multiplication.

In events and fairs, as part of its awareness raising activities, Pétanielle also distributes documents produced by other associations or by the Réseau Semences Paysannes. The association participates in eight recurring events annually. The association also responds to specific requests for participating in conferences, debates, interviews, with contributions ranging from seed production practices, to dealing with commons, and use rights.

1.3 « Organizing »

1.3.1 Properties WITHIN the initiative (closure)

The challenge for the association is to develop and keep alive a link between farmers and gardeners. This is reflected in the division of tasks (see point 1.2.1) and in the way Pétanielle works towards ensuring mutual support.

At the organizational level, this is reflected in the annual organization of a general meeting which elects a Board of Directors for 2 years. Both farmers and gardeners are represented in the Board. One farmer pointed out that the awareness of peasant work by gardeners compensates for the difference in representation of the two groups. According to him, the key to gardeners' commitment comes from giving them a responsibility (for conservation). This is vital to allowing farmers to undertake the multiplication work. The link through practice binds people together and allows exchanges in the collective effort.

What binds members together is the common approach. The governance model is not particularly theorized and reflexive, but it forms an effective background framework. The common includes all the seeds available in the collection and the knowledge that circulates there. Rules of use, which include the rights and obligations of users, define access to the resource. The Board and the General Assembly guarantee compliance with the rules.

By affirming a common-based management, Pétanielle, adds a political dimension to seed production. The association benefits from the contributions of a member who has worked on the issue of commons within the ATTAC association (Association for the Taxation of Financial Transactions and for Citizens' Action). The organization's website states that the commons

"fundamentally oppose the exclusive private right which is the legal basis of ownership enshrined in the Napoleonic Code. A common therefore also has a major political dimension since it must be able to claim a legal area in which:

- the right of use must not be subject to any private property rights, such as a patent
- the right of use must not be prevented by regulations imposed by the public authority.

This use right may be in contradiction with the standards imposed by the public authority because the latter tend to be designed based on the concept of private property, standardisation and economies of scale. (web site Pétanielle)

1.3.2 Properties BEYOND the initiative (outreach)

Pétanielle does not wish to expand its territory of action. The challenge for the association is to remain at a sustainable size, in terms of internal management, as well as in terms of the number of people involved and the number of varieties to maintain in the collection. Pétanielle wishes to cultivate the link between each of its members. It is important for the association that people know each other. This human link ensures that seeds put into circulation are not perceived and/or appropriated as a resource to be exploited. Seeds, within Pétanielle, convey the idea of the connection with the underlying work of finding, maintaining, multiplying and disseminating these seeds. It's not just equipment! They are not reduced to material. To this end, the organisation shares its experience within the RSP, particularly on how to manage seeds as commons.

1.3.3 Transformative effects beyond the initiative

Pétanielle counts on two elements which allow to manage the seeds as commons and for each member to feel responsible in this shared effort. The first element is the commitment by gardeners', who are essential participants in the initial multiplication phase in small plots.

The second element is the fact that farmers are considered "stewards" of a variety. The document which formalises

this stewardship role reflects both the commitment of the parties (Pétanielle and the farmer), and the harvesting protocol.

PART 2: ANALYSIS

2.1 Knowing

2.1.1 Properties WITHIN the initiative (closure)

Pétanielle has different means to share knowledge within its network. The association organizes events targeting gardeners and farmers ("grain market", "field days"). The members of both groups meet on issues related to how to manage the association (General Assembly, Board of Directors), and for the collective activity of threshing. In terms of governance, both groups have the same right in electing the members of the Board. Both gardeners and farmers are becoming more aware of each other's contributions.

2.1.2 Transformative effects beyond the initiative

Pétanielle's approach challenges the conventional separation between professions related to seed selection/multiplication. Pétanielle suggests a de-professionalization through gardeners' seeds appropriation. Collaboration allows farmers to have an available seed collection without having to undertake the laborious work done by gardeners. Gardeners, on the other hand, are reconnecting with seeds.

2.2 Framing

2.2.1 Properties WITHIN the initiative (closure)

Citizen action is the foundation of Pétanielle's work. There are different but complementary roles for farmers and gardeners. However, governance remains collective. Pétanielle raises awareness on political issues related to seed and derive their legitimacy from their ability to maintain and promote a collection adapted to their territory.

2.2.2 Properties BEYOND the initiative (outreach)

Pétanielle promotes its activity towards gardeners in dedicated events such as garden fairs. Farmers are aware of Pétanielle activities thanks to communication with other farmers already involved.

2.2.3 Transformative effects beyond the initiative

By reconsidering seeds as a non-appropriable common, Petanielle offers a perspective that is the opposite of the conventional seed system. However, Petanielle insists that this is not the same as open access. To dispose of the treasure that the collection represents, gardeners and farmers must be committed to the collective and to the seeds (stewardship agreement, gardeners' commitment).

2.3 Networking

We identify two central bridges that allow the heterogeneous collective to maintain itself. First, the rules of use: these formalize access without restricting it excessively. The mode of use engages everyone, not only in a relationship with the seeds, but also in a relationship with other people in the association. Everyone feels responsible for the joint management.

The second bridge concerns the governance of the association. The central element is to consider members as citizens contributing to the development, maintenance and circulation of seeds from landraces. Thus, the awareness of the gardeners (there are 180 of them) of the place of farmers in an alternative food system compensates for the lower presence of farmers (30). One of the farmers we met told us gardeners respect his work and opinions, and vice versa.

PART 3: SUMMARY

This case study highlights two central issues in the management of cultivated biodiversity.

First, Pétanielle comes into the political debate on seeds through concrete practice. It does not present the commons as a political element, but as a concrete alternative to the capitalist approach based on private property.

The second lesson concerns cooperation between gardeners and farmers, each with specific roles and mutual recognition of each other. Gardeners have more time than farmers, but less space, while farmers have less time, but more space. Thus, the link between safeguarding, conservation, pre-multiplication and multiplication allows maintaining and disseminating landraces and old varieties adapted to the territory. This avoids reducing the question of diversity to an exclusively agronomic subject or even to purely economic interests.