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Introduction

Let's liberate diversity!

The third European seed seminar took place from 18 to 20 May 2007 in Halle, Saxony-Anhalt (Germany) and focused on the preservation of the diversity of cultivated plants in the hands of farmers and non-profit seed initiatives. 135 farmers, gardeners, plant breeders, representatives of genebanks and initiatives for the preservation and use of plant diversity from 25 countries took part in the seminar. It was organised by the BUKO-Campaign against Biopiracy (BUKO-Kampagne gegen Biopiraterie), the European Civic Forum and the Association for seed production free of genetic modification (Interessengemeinschaft für gentechnikfreie Saatgutarbeit) in close cooperation with the Réseau Semences Paysannes (RSP). The seed seminar followed the steps of the two previous seminars in Poitiers (France) and Bullas (Spain) organised by the French seed network RSP and the Spanish network „Red des Semillas“ respectively. The gatherings echo a still relatively new movement initiated by peasant organisations defending the right of farmers to keep and re-use their seeds. 80 per cent of the European cultivated plant varieties have disappeared but it is only in the past few years that initiatives to counter this development have been launched. The work of European preservation initiatives is rendered more complex as they have to deal with a whole series of specific questions from agricultural policy, as well as questions of a judicial and of a more general social nature. Farmers worldwide fight for their right to preserve, swap and produce traditional seeds while seed multinationals attempt to gain control over the diversity of plants.

The focus of the seed seminar was put on the preservation and development of non-genetically modified (GM) cultivated plant diversity as a reaction to the experiments with GM plants conducted in the laboratories and on the fields of the German genebank for cultivated plants, the Institute for Plant Genetics and Research into Cultivated Plants (IPK) in Gatersleben, which stocks one of the largest collections of cultivated plants. The town of Halle near Gatersleben was chosen for the gathering to send a clear message for the protection of seed collections from GM contamination. Experimenting with GM crops in the direct vicinity of the genebank and sowing GM peas and wheat in open land clearly represent a risk of contamination for ancient variety. The genebank is thus no longer fulfilling its mission of safe conservation. Further, it is indirectly opening the way for the privatisation of stored genetic resources by seed multinationals.

Against this background, three main questions arose for the seminar and structured the programme:

1. Preservation of seeds in seed banks – public access, present practice and ensuring the absence of genetic modification
2. Preserving and re-sowing cultivated plants in gardens and on the farm – practical experience, legal context and barriers
3. The special importance of wheat and the present risk to its genetic basis.

Organising the gathering in Halle presented the additional advantage of making it relatively easy to access for members of eastern European initiatives so as to strengthen the exchange with them. Participants and speakers from Russia, Poland, Latvia, Hungary, Romania, Bulgaria, Slovenia and Georgia were thus able to tell of their experience. Speakers and participants from Chili, Iraq, Iran, Israel, Mali, Tunisia and the USA provided a perspective from outside Europe.

The seminar was made possible thanks to many dedicated people. Their help reduced the costs and, most of all, enabled the participation of people who receive no financial support for their preservation work.

Farmers, organic shops and organic producers, both local and from the rest of Germany, particularly contributed to the success of the seminar with their food donations. These could not participate in the seminar partly out of time constraints but fully supported its goals. The seminar would hardly have been possible without the team of the listing of self-organised seminars (Alternatives Vorlesungsverzeichnis) of the Halle University students, who provided in particular rooms for the meeting and numerous accommodation opportunities. The spontaneous and straightforward support of the „Spielehaus e.V.“ association and Ulli Menne's delicious cooking contributed to the most comfortable sides of the seminar.

The „Fondation pour une Terre Humaine“, the Evengelischer Entwicklungsdienst (EED), Misereor, the Software AG foundation, the European Civic Forum, the German Federal Agency for Agriculture and Food (Bundesanstalt für Landwirtschaft und Ernährung), the Foundation Helixor, „dock-europe“, Longo Mai Switzerland and the Aktion Selbstbesteuerung provided financial support. We would like to give our warmest thanks to all the people who contributed to the success of the seminar, especially Barbara Hahn from the team of interpreters.

Andreas Riekeberg
Anne Kristin Schweigler
Herma Ebinger
Ieke Dekker
Jürgen Holzapfel
Siegrid Herbst

Nicolas Supiot, President of the French network for peasant seeds, *Réseau Semences Paysannes* (RSP)

Opening speech

The failure of elite seed varieties developed by industry

After 1945, funds from the Marshall plan and public research began to replace the diversity of farmers' varieties with the Green Revolution's so-called “elite varieties”. These brought along a waste of fossil energy with chemical fertilisers and pesticides, agricultural mechanization and often field irrigation, all of which are required for the cultivation of elite varieties and replace the work of farmers. These went off to work in factories, eventually ended up unemployed. The definition of norms such as distinctness, uniformity and stability required for authorization fits the elite varieties and ban traditional farmers' varieties from the market. The ancient right of farmers to swap their seeds was abolished. Once hybrid varieties and certified seeds had been introduced, farmers were faced with the prospect of a fine if they re-sowed their own harvest grain. Genetically modified plants and their patents are now finishing off the destruction of farmers' rights.

The consequences of this system are devastating. In western Europe, soils and water bodies are contaminated, the population suffers from diseases induced by pesticides and industrial food, rural regions are depopulated and agricultural production is delocalised into regions with looser social and environmental restrictions. The accession of east European countries to the European Union forces millions of smallholder farmers to quickly shift from their traditional varieties to the ones that are authorized in the EU. It is foreseeable that

smallholders will disappear together with the traditional seeds, making way for a few large agricultural companies and their large-scale export-oriented production.

The revival of peasants' seeds

Biodynamic farmers were the first to understand in the past century that the trap would close first at the seed level. They preserved and selected their traditional varieties so as to preserve their independence from industrial ones. Later on, hundreds of associations and amateur gardeners started to cultivate and preserve thousands of traditional varieties. Numerous farmers realised with the expansion of genetically modified (GM) seeds that they also had to actively work for the protection of their seeds if they want to keep their autonomy. Several hundred farmers and gardeners met in 2003 in Auzeville (France) and founded the *network for peasant seeds (Réseau Semences Paysannes, RSP)*.

The first seminar „Liberate diversity“ held in 2005 in Poitiers (France) gathered several hundred people from nearly all of Europe as well as from South America, Africa and Asia, thanks to the cooperation with the *GRAIN* organisation. The following year, the Spanish network *Red de Semillas* organised the second seminar in Bullas. After these southern venues, today's seminar is taking place in Halle, in central Europe and closer to the East. The Italian network *Rete Semi Rurali* proposed to host the seminar in Italy in 2008. These opportunities enabled us to share our experience and have given rise to a series of common convictions:

1. Impossible coexistence with genetically modified organisms

Coexistence is the Trojan horse of contamination. The labelling threshold on foodstuff of 0.9 per cent GMO content becomes a right to contaminate. For the farmers in the South who reject GMO seeds, European resistance against GMO food represents a big hope. If European countries accept coexistence, their governments will also have to give up.

2. Ban patents on life and the 1991 UPOV Agreement

With the argument that it is a common heritage of Humanity, the seed industry is laying its hand on all it can in farmers' fields, protects it with patents and bans the resowing of harvested grain. In 1991, a transnational agreement of the UPOV parties on the distribution of plant material (see Podium 2) was enacted, legalising seed patents. In opposition to this, we demand a ban on GMO and mutated seeds and the monitoring of hybrid seed trade so that it does not compromise peasant seeds. Once the 1991 UPOV Agreement and patents on life are banned, the industry's profits will dry up.

3. Farmers' rights to preserve, resow and exchange their seeds

An increasing number of farmers are beginning to select their own varieties and for that purpose they resow part of their harvest and exchange their seeds. Directive 98/95/EC (see podium 2) regulates dealings with conservation varieties and had the potential to give farmers some autonomy. However, nine years following its publication the Permanent European Seed Committee reduced this autonomy to a few ancient varieties and restricted their cultivation to their alleged regions of origin. The Peasants' Seed Network is creating its own rules for exchanging seeds, whether they are legal or not. With this approach we attempt to influence lawmaking in official negotiations, even if we, farmers' representatives, always constitute a minority.

Farmers, sometimes with the help of researchers, are looking for their parents' know-how and the seeds they conserved to start working with them again. Some are still around, mainly fruits and vegetables. In terms of cereals, little remains. Traditional varieties collected in farmers' fields have been preserved in “ex-situ” collections where they degrade because they can no longer evolve. Most of them would have disappeared already without these collections though, hence the urgency to revive them in the fields.

The International Treaty on Plant Genetic Resources (ITPGR-FA / see Podium 1) recognizes the rights of farmers to conserve, resow and exchange seeds and participate in national

decision-making that concerns them, but these rights often remain negated by national and European regulations. These international agreements must get embedded in national and European legislations.

4. Collective rights of farmers on genetic resources

In order to tighten its grip on cultivated plants, the industry contaminated with GMOs the regions of origin of key species that feed humanity: the maize in Mexico, rice in Asia, wheat in Iraq. In the Gatersleben genebank, it organizes the contamination of collections. The only notable, truly international initiative for the conservation of genetic resources concentrates on the creation of a gigantic underground bunker in Spitsbergen – and the same lobby hides behind it. It is said that the future lies in synthetic biology, in the digitalized genebanks whose collections can only be used for artificial genetic constructions, unstable transgenic fusions and genetic mutations. Genetic resources are first and foremost the collective good of the communities that have preserved and selected them, not the raw material of the seed industry. They need to be safeguarded, remain public and protected from genetic contamination. Farmers should have free access to collections so they may reintroduce them into their fields before they definitely disappear. Farmers must have the right to describe them, make them publicly known, and exchange them in their habitual manner. This is crucial for the construction of the food sovereignty of people.

What is happening in the genebank of the Institut of plant genetics and crop plant research in Gatersleben?¹

With at present 147.949 accessions (plant samples) from 2.556 species, the genebank of the Leibniz Institute of plant genetics and crop plant research (IPK) in Gatersleben, Saxony-Anhalt, hosts one of the most significant collections of plant genetic resources worldwide. Cereals, legumes, vegetables, medicinal plants and seasoning herbs (128.595 accessions) are stored and reproduced at the Gatersleben site itself. The outpost situated in Groß Lüsewitz, Mecklenburg-Western Pomerania, hosts the potato collection (5.894 accessions), while oil and fodder crop plants (13.460 accessions) are stored at the outpost in Malchow, Mecklenburg-Western Pomerania. A total of 14.544 genebank samples were grown in 2005 on fields or greenhouses in Gatersleben, Malchow and Groß Lüsewitz in order to preserve their germinability. In average, 10 per cent of the collection are grown each year.

Private individuals, institutions and breeding companies from the whole world can access the seed samples of the genebank. An average of 15.000 samples are distributed yearly on demand.

The site has however developed over the past years into one of the most important centres of agricultural genetic research in Germany, nowadays referred to as „Green Gate Gatersleben“ (GGG). Numerous GMO experiment field trials took place over the past ten years both on the fields of the IPK and on sites in the direct vicinity of the genebank sites. Further, the IPK and companies such as the BASF daughter company „SunGene“ conducted GMO plant experiments in greenhouses. A total of 32 experimental field trials took place since 1996: one with tobacco, eighteen with potatoes, nine with rape, three with peas and one with wheat.

Experiments both in fields and greenhouses constitute an eminent threat for the plant samples of the genebank, and a ban on such experiments is thus imperative to protect the genebank samples. A contamination of the samples could very rapidly lead to GMO contamination in the whole world.

¹ from: Bauer, Andreas 2007: *Genebank Gatersleben: Genetic engineering or genetical resources? (Genbank Gatersleben: Gentechnik oder genetische Ressourcen?)*
Umweltinstitut München

Podium 1

Preservation of seeds in genebanks – public access, present practice and ensuring the absence of genetic modification

Six podium contributions addressed this issue. Béla Bartha (Pro Specie Rara, Switzerland) lectured on the situation in European seed banks; Juri Tschesnokow (Russia) presented the Wawilow-Institute Petersburg; Renáta Bóscó (Hungary) described the situation of the genebanks in Hungary; Antonio Perdomo (Red the Semillas, Spain) talked about a report on the access to genebanks in his country; María Isabel Manzur (Fondación Sociedades Sustentables, Chili) talked on the difficulties of preserving the diversity of cultivated plants, and Prof. Andreas Graner presented the Gatersleben Institut of plant genetics and crop plant research.

Farmers' networks for the preservation of seeds had up until now hardly addressed the situation of genebanks but the latest developments in this area, of which the situation in Gatersleben is only one example, now require some attention. The aim of the first podium was not, in spite of all the criticism, to oppose genebanks on the one side and living preservation work on the other, but rather to show perspectives for a possible cooperation: European farmers and preservation initiatives after all depend on genebanks. A large part of the seed diversity has already been lost, and the diversity stored in genebanks is necessary to increase the diversity on fields and gardens. An essential condition for this is that the stored samples are guaranteed GMO-free.

Situation, focus and research of European genebanks

Genebanks were originally set up as a reaction to the important loss of biological diversity caused by industrialisation and further agricultural changes (such as the „green revolution“). They were established by universities and other research institutions, not by farmers' organisations, and this shapes their focus, perspectives and the way they work, as illustrated by their focus on the genetic and molecular level, their research and documentation focus and their choices of cooperation partners. What, how and for whom biological diversity is chosen for collection, preservation, cataloging, documentation and research depends in large parts on the perspective and needs of the genebank. Clearly, the interests and needs of farmers and amateur gardeners differ from those of seed companies and research institutes.

The European Cooperative Programme for Plant Genetic Resources (ECPGR)¹ was founded in 1980 and is a network of European genebanks. These communicate primarily on technical preservation-related issues, exchange material and coordinated their cooperation. Non-government organisations (NGO) have for the past several years been able to delegate an observer to this network. Béla Barta (Pro Specie Rara) is presently the representative of all European seed preservation NGOs. Any questions and comments on this network of European genebanks can be sent to him.

The ECPGR established the large European online database ERISCO² creating a digital catalogue of all samples in European genebanks. This European documentation initiative has a high priority and is aligned on the needs of commercial breeding on a molecular level. Consequently, the species are described in such a way as to make the characteristics that are

most interesting to industry and research easy to find, facilitating industrial use. This catalogue is of little use for farmers, as their work requires other information.

The present research projects of the IPK Gatersleben illustrate the alignment of genebanks on the needs of commercial and biotechnological breeding. As Professor Graner explained, the IPK tries to “understand how seeds develop and (we) have large projects on chromosome diversity and evolution. [...] we have programmes on molecular plant physiology and cellular biology [...]. We conduct applied research, we try to produce 'development tools' for plant breeders, mainly for commercial plant breeders.”

Genetic engineering companies and genebanks often cooperate with one another. The „Nordic Genebank“, for instance, a merger of all Scandinavian genebanks, works like the IPK in close cooperation with genetic engineering companies.

Reports from various countries point out the lack of financial and political support given to genebanks by state institutions, which makes them dependant on lucrative cooperation with seed and biotech companies.

The accessibility of genebanks for farmers and gardeners varies within the EU from one country to another and from one genebank to another. In all countries though, farmers and gardeners generally lack information and knowledge on the stocks of genebanks, such as information on the characteristics of the samples with which farmers work, and on the accessibility of these resources.

The representatives from Bulgaria, Greece and Portugal reported a positive cooperation with their respective genebanks.

European genebanks can generally be grouped in two categories: Those that refuse or have to close certain collections because of insufficient funds and lack of political support, and those that through cooperation and third-party funds mutate to service providers for the industry.

GM-contamination

The GM-contamination risk of plants in the genebanks seems more or less irrelevant for the genebanks themselves. They did agree on a „best practice“ to avoid GM contamination, but this agreement is of a voluntary nature and the understanding of „best practice“ can be interpreted in many different ways. Systematically testing new incoming seeds to find a potential GM contamination is in any case not part of this best practice. For instance, the genebank in Gatersleben states it evaluates the risk of contamination. The samples are only checked for GM-contamination if they are known to come from a region where genetically modified plants of the same species are grown. Professor Graner states: „If you say you don't want any GMO, then I probably couldn't give you any guarantee on the matter, and actually I don't do it anyway.“

But there are numerous ways in which a genebank sample can be contaminated. Juri Tschesnokow exhaustively detailed the risks of GM-contamination in genebanks: the risk not only exists as a result of the collection of samples in regions where GMOs are known (or not) to be grown, but also when samples are grown, bred or preserved on or close to fields where GMO were previously grown (secondary growth, cross-pollination by wind and insects). This is particularly true for the fields of the genebank and around it. Also, the possibility of a criminal intentional contamination cannot be entirely excluded. Juri Tschesnokow gave the example of the University of California, Davis, which unknowingly distributed transgenic tomato seeds over a long period of time. It still remains unclear how these transgenic seeds got into the genebank.

This makes it even more important to raise awareness on the risk of GM-contamination which genebanks are exposed to. Even though GMOs are not, as far as we know, grown in all European States (whether for research or commercial purposes), the risk of contamination through seed swapping concerns all countries.

Genebanks being public institutions, their collections „belong“ to the population. Genebanks should thus feel, or be made to feel, obligated to keep this treasure and protect it from risks.

Genebanks and international discussions

For years, genebanks as preservation sites have taken on a significant position in discussions on the Convention on Biological Diversity (CBD). Since it has become possible to turn genetic resources into private property thanks to intellectual property rights such as patents, these have acquired a „concrete“ commercial value. Which is why parties at CBD conferences negotiate on the rights related to access, use and compensation. The idea was to make countries from the South, where the largest biodiversity is located, share in on the profits from commercial use generated primarily by institutes and the industry from the North, or at least to compensate them for lost use. These negotiations on compensation and access to the resources are referred to as ABS negotiations (Access and Benefit-Sharing). Genebanks are primarily interested in unobstructed access to genetic resources, and less in the rights of indigenous people related to the biological material from their regions.

Genebanks participated here and within the frame of the international seed treaty³ in the development of a standard agreement for the transfer of material. This standard Material Transfer Agreement (sMTA) can be applied voluntarily and regulates issues related to the transfer of biological material, such as what receivers are allowed to do with the material and issues of legal ownership. These sMTA also regulate the transfer of material among genebanks.

Preservation and genebanks outside of Europe

In places such as Mali, preservation work (still) takes place on the fields and in the gardens, and this illustrates how the division of work (production, preservation and breeding) prevails in people's heads in industrialised countries. María Isabel Manzur from Chili explained that genebanks there are interested in cooperating with preservation initiatives. Preservation NGOs and farmers' associations however are sceptical and fear that this could eventually facilitate the access of seed companies and research institution to their traditional varieties, which in the present context could rapidly lead to the resources they hand out being patented and privatised. The genebanks do not explicitly speak out against the patenting of the resources they distribute.

Chili focuses on the reproduction of seeds. Many seed companies give out their seeds, both conventional and genetically modified, for reproduction there. GM-seeds, for the most part corn, soya and rape, are planted and reproduced on a total surface of 20.000 ha. Experimental field trials are allowed for 16 different varieties. In 2000, the North Dakota State University sent soy bean seeds from their genebank to Chili for reproduction. When they received it back, the reproduced seeds had been GM-contaminated, and it is assumed that the contamination took place in Chili. It was however only discovered once the seeds had been distributed to farmers.

Throughout the world, centralised collections such as genebanks are exposed to many risks other than GM-contamination, such as wars, natural disasters, floods and power cuts.

Alternative approaches

The speakers also presented alternative approaches: former employees of the genebank in Hungary launched an initiative that primarily focuses on setting up conservation networks in cooperation with farmers and amateur gardeners. In Austria, the organisation „Arche Noah“ established a large grassroots conservation network. In France, research is conducted with a participative approach whereby researchers work in close cooperation with farmers who define, or contribute to the definition of, the research objectives.

Criticism to genebanks from the audience:

1. “Conservation” as conducted by genebanks is problematic: If the seeds are grown only every ten years, germinability suffers, plants lose their ability to adapt to climatic and regional changes.
2. Sowing on genebank fields, in greenhouse etc. does not correspond to the conditions on the fields, which means it may well be that the seeds obtained are not adapted to the fields.
3. The primary function of genebanks should not be to provide services for commercial breeders, seed companies and biomolecular research.
4. Genebanks ignore the risks of GM-contamination even though this affects their own best interests.
5. Genebanks ignore the important role of farmers and amateur gardeners for the preservation of cultural diversity and exclude them with their focus and way of working.
6. Genebanks in rich countries were established thanks to biopiracy: The farmers throughout the world who provided the varieties collected by genebanks can hardly access these varieties again. These are now for the most part used by seed companies to breed new, legally protected varieties.

¹ ECPGR-European cooperative programme for crop genetic resource networks;
<http://www.ecpgr.cgiar.org/>

² <http://eurisco.ecpgr.org/>

³ International Treaty on Plant Genetic Resources on Food and Agriculture, ITPGR-FA

Podium 2

Preserving and re-sowing cultivated plants in gardens and on the farm

On the second podium, Gebhard Rossmanith of the Bingenheim Seed working group (Bingenheimer Saatgut AG) spoke on „conserving, using and developing diversity“ and on the related work of the seed network *Initiativkreis für Gemüsesaatgut und des Kultursaat e.V.* Didier Meunier presented the work of the French seed network *Kokopelli*, and Blanche Magarinos, the lawyer of *Kokopelli*, talked of two legal actions against *Kokopelli* for alleged illegal seed sale. Mamadou Lamine Coulibaly from the Malian „*Coordination Nationale des Organisations Paysannes*“ (CNOP) enriched the podium with his portrait of the very different „seed situation“ in Mali. Ahmed Taheri of

the non government organisation CENESTA (Centre for Sustainable Development & Environment) in Iran talked of the efforts undertaken for the preservation of native wheat seeds in Iran.

Gebhard Rossmannith addressed the present situation as regards conserving, using and developing seeds and showed the gap between the day-to-day work in commercial organic horticulture and conservation work. This gap must be overcome if the diversity of agricultural crop is to be preserved in the long run.

Genebanks preserve seed lines and varieties that generally do not serve the market, and are not required and not offered by the market.

Conservation initiatives are associations, small companies or similar organisations devoted to preservation on a small scale that conserve and distribute varieties and lines on a non-profit basis.

Commercial horticultural farming and gardening companies hardly do any conservation work anymore, let alone develop new, adapted varieties. They have generally given up all sovereignty on the varieties they grow. The three areas of variety breeding, production of seeds and vegetable growing are subject to a complete division of work. Vegetable producers buy their seeds just like any other equipment such as substrate, diesel, foil or pots.

One cause of this division of labour lies in the massive requirements made for instance as regards the quality of appearance, as well as the quantity and uniformity of the products. These requirements apply to modern horticulture, including organic horticulture.

Horticulturists react to this pressure by buying varieties expected to be the most successful. These are generally high-performance varieties: Hybrids with the resistance required for this sort of intensive horticulture. A few years ago, horticulturists were still growing several varieties including their own, and thus preserved diversity. This is nowadays hardly possible for a company that wants to survive economically.

At the same time, most of the small local seed companies have been taken over by large international seed corporations. These are increasingly trying to control the organic seed sector. The varieties they develop are subject to intellectual property rights such as patents or laws for plant variety protection, thus obliging farmers to pay royalties when they intend to save seeds from their own harvest and grow them the next year. This is further impeded by protoplast fusion (a technique which can transgress the boundaries between plant species and is thus related to genetic engineering) and by the use of CMS (Cytoplasmic Male Sterility). Farmers become dependant from corporations. This subordination and the loss of diversity of cultivated plants are becoming risks for farming, including for organic farming, and this development remains for many unnoticed, consciously ignored or is simply not questioned.

In order to reduce the gap between the conservation of biological diversity and the production of food, Gebhard Rossmannith argues, biological diversity must find an entry point to the market. This requires a broad public campaign in order to raise awareness for this process among all market actors: producers, processors, traders, consumers. Conserving seeds like museums would or simply in the garden is not enough. The consumers must demand and eat diversity – this is the only way to secure locally adapted varieties and their breeding. In addition, a favourable legal framework needs to be created to enable the commercial use of amateur and conservation varieties.

Conservation activities in different countries

Local varieties have long remained ignored and neglected in Europe. In the last years, the

realisation that this true wealth was getting lost set in. There are now initiatives and networks of smallholders for the conservation of biological diversity, generally in the sector of organic agriculture, in several European countries. Their activities and issues comprise: local variety seed reproduction and exchange among farmers and amateur gardeners, production of non-GM seeds, presentations and public events on this issue, defence of the rights of smallholder farmers, and attempts to get traditional /local varieties onto the market. Non government organisations (NGOs) often support their work.

In Austria, regional varieties are now considered a rarity and becoming image products (e.g. wild emmer, wild einkorn, tomatoes of different colours). In Switzerland regional varieties are marketed directly and delivered to restaurants. In Bulgaria and Greece, the demand for varieties with an interesting taste is also growing. In Chili, some NGOs are cooperating with cooks to make them include traditional varieties in the menu. The governments of individual States and EU projects now also financially support diversity conservation. In Greece for instance, the EU is financing the on-farm conservation of seeds from genebanks, and in Slovenia a programme supported by the EU is taking place for the collection of biological diversity.

Whether and in how far farmers' conservation work is conducted in a given European country is difficult to evaluate, as only elements with a market value are perceived and included in statistics.

An example from Germany

20 years ago in the Federal Republic of Germany, the „Initiativkreis für Gemüsesaatgut aus biologisch-dynamischem Anbau“ (Initiative for bio-dynamically grown vegetable seeds) was established, among others to take seed autonomy in the organic agriculture sector forward.

About 100 nursery companies are now part of the network and bio-dynamically preserve the varieties and reproduce the seeds. Started mainly for the production of seeds to cover the members' own needs, the network developed and became larger and larger. The variety diversity is now distributed to other users by the Bingenheimer Saatgut AG.

However, to be allowed to sell seeds, the varieties must be inscribed in the Common EU Catalogue of Varieties of Agricultural Plant Species („EU catalogue of varieties“ for short) and comply with the requirements of the German Act on the marketing of seed (Saatgutverkehrsgesetzes, SaatVerkG), an „institution hostile to diversity“. The Bingenheimer Saatgut AG faces up to these difficulties to conserve diversity with a focus on commercial organic horticulture.

The Bingenheimer Saatgut AG is a joint stock company owned by its seed producers; it thus cannot be bought by a large seed corporation.

It became evident with time that it isn't sufficient to simply preserve heirloom varieties. The further development of the varieties is necessary, as the expectations related to the varieties and the needs of organic agriculture have changed (e.g. climate). In this spirit, the association Kultursaat e.V. was established to take on the task of further developing cultivated plants.

The expectations of seed customers in the organic sector are very high. They want true-to-type varieties with good germinability, guaranteed 100 per cent organic and pathogen-free. The horticultural companies need to produce a certain quantity, which implies a minimum of uniformity of the varieties; the demands made on conservation breeding are thus huge. But these varieties can be grown again and handed on, seeing as they are no private property, the rights for the varieties being in the hands of the not-for-profit association.

An example from France

The association Kokopelli was founded in 1999 and aims at distributing and promoting heirloom seeds produced by a dozen professional producers and by the association members. Kokopelli receives no State support but is supported by a network of 5500 members, the contribution of 300 of which is to cultivate threatened conservation varieties. They produce a high quantity of seeds to feed the activities of «Seeds without borders » that intends to provide the peasant communities of the world, on their demand, with genetic resources that have for the most part already disappeared in their own country. The association also organises trainings open to all to produce seeds, and recently launched a cooperation with the regional natural reserve of the Gorges du Verdon (in the South East of France) in order to create a place for seed production and public training.

The two lawsuits launched against the association in 2006 resulted (in 2008) in two heavy sentences. A large part of the Kokopelli collection is thus officially prohibited from being sold and distributed. The result of the suits brought against the association could create a jurisdictional precedent at the European level and hinder other organisations for the conservation of biodiversity from distributing seeds.

Outside Europe

The situation is very different in most African, Asian and Latin-American countries. Between 70 and 80 per cent of the smallholder farmers there still live off traditional, local and free varieties, i.e. they produce their seeds and conserve variety diversity themselves. This seed autonomy is necessary for their survival, a fact which the farmers there are much more conscious of.

Mamadou Lamine Coulibaly of the Coordination Nationale des Organisations Paysannes (CNOP) in Mali illustrated the situation in most African countries with the example of how people in his country deal with seeds. There, seeds have a spiritual, cultural, social and economic significance. They are exchanged within a large network reaching from Senegal to Burkina Faso. The farmers develop and conserve the seeds themselves, there are no genebanks. Mamadou Lamine Coulibaly assumes that the setting up of genebanks is part of a strategy meant to make people dependant. And he poses the question of whether the fact that the Russian Wawilow Institut stocks seeds from Mali to which Malian farmers have no access isn't a form of biopiracy.

Colonisation destroyed traditional collective cultivation methods e.g. with huge cotton monoculture plantations. These products, predominantly meant for export, swamped out the cultivation of food for subsistence and made traditional varieties disappear from fertile fields. A new form of colonisation crops up in the pression with which the USA, the Worldbank and other institutions want to impose the cultivation of genetically modified crops in Africa. In spite of the lack of precise information, the rejection of GMO is very strong among African farmers. For Mamadou Lamine Coulibaly, they know that this is meant to put them into further dependancy.

The farmers organisation CNOP co-organised the world forum for food sovereignty „Nyéléni 2007“ in Mali. From this forum, Mamadoo Coulibaly took with him the question of how the widespread cultivation of GMOs can be impeded, and of the support from people in the industrialised countries with which smallholders in the whole world can count.

Ahmed Taheri reported that the first participatory breeding experiment (where farmers and scientists conducted common research) started in 2006 in Iran with the help of the Syrian

ICARDA genebank and the Iranian agriculture ministry. 40 farmers are working together and conducting trials with a total of 100 different wheat varieties on a “field school” in the township of Garmsar in the Semnan province.

There is a blatant lack of wheat diversity in Iran. In the Kermanshah province which stretches over more than six climate zones and where more than 500 000 hectares (more than 1.2 million acres) of bread wheat are cultivated, there is only one wheat variety available on the seed market. This explains why the agriculture ministry and scientists express such an interest for the “field school”. Participatory research has already lead to successes in other countries. The wheat varieties adapted to aridity are particularly interesting in this respect. The goal of the project is to conduct their own seed reproduction within a few year.

Taheri emphasized the important role of farmers in this research work. Indeed, the management and conservation of agro-biodiversity wouldn't be possible without their specialised knowledge and their organisation structures.

Unfortunately, not all his explanations were comprehensible due to translation difficulties.

Legal obstacles

The legal provisions for trading seeds pose important problems for conservation work in the European Union. Seeds have to be inscribed in a variety list in order to be sold. A national seed catalogue was set up in 1922 in France. About 40 years later, in the 60s and 70s, the interstate UPOV convention was signed and codified certain minimal standards for national seed legislation. This lead to a loss of numerous heirloom varieties of vegetables, cereals and flowers, as these varieties did not comply with the criteria defined for inscription in the seed catalogue: They are not „uniform, stable and distinct“. But precisely because they are not uniform, stable and sometimes also not distinct, they have the ability, unlike industrial varieties, to adapt to their environment and to climate. They can be further developed as a population.

Moreover, the costs of inscription in the catalogue in no way match the economic significance of heirloom varieties and by far exceed the financial capacities of small conservation initiatives. Indeed, the inscription cost for a cereal variety costs 8.000 Euro for the first ten years in France. Because of these high inscription prices, thousands of heirloom varieties are not inscribed anymore (or never were) and can thus not be used commercially. In France, the creation of an amateur catalogue attempted to defuse the problem: The inscription there „only“ costs 300 Euro. The improvements are nevertheless marginal as the same criteria apply to farmers varieties as to commercial ones: distinctiveness, uniformity and stability.

According to article 17 of the EU Directive 98/95/EC, Member States have to set up exception rules for the conservation of ancient farmers' varieties, so-called „conservation varieties“. The further development of conservation work depends on the national implementation. The German draft for the implementation of the European conservation Directive of April 2007 would set limits on the cultivation of conservation varieties to the region of origin and in terms of quantity to a maximum of 0.5 per cent of the quantity of the variety grown in a given year or to maximum 20 hectares. Seed producers fear that the monitoring of the planned regulations will impose disproportionate costs on them. They criticise the fact that limits on cultivation and monitoring costs will not facilitate the cultivation of conservation varieties but rather endanger the alleged goal of the EU to conserve and further develop varieties on-farm, i.e. through their use in gardens and on the fields.

The problems faced by conservation work in European countries are varied and contradictory. In Italy for instance, industrial varieties are designated with the name of ancient varieties for reasons of marketing and image.

All industrialised countries are faced with primarily one difficulty: The knowledge on the existence of old varieties is getting lost, as is the knowledge on their reproduction, the production of seeds, selection and cultivation. There too, the notion that the further development of varieties should be an issue left to scientists and professionals now almost completely prevails, and the division of work is entirely accepted. Similarly, the opinion that seeds are a commercial good and not – as was the case over centuries and still is in many parts of the world – a common good has now been enforced in industrialised countries.

Conclusion:

Cultivated plant diversity is limited or destroyed in Europe by EU legislation as well as by market forces. Their conservation is at present hardly possible on the basis of economic criteria and is mainly carried on by non-profit associations. Some exceptions persist in Austria and Switzerland where old varieties have become sought-after specialties again. While seeds have become one element among the material required by an agricultural company just like diesel or fertilisers, it has a high social significance in parts of Africa, Asia and South America. Local varieties are preserved and exchanged by smallholder farmers themselves. Seeds constitute the basis for future regional food sovereignty.

¹UPOV: Union internationale pour la protection des obtentions végétales, en anglais: International Union for the Protection of New Varieties of Plants.

<http://www.oekoseeds.de> The Bingenheimer Saatgut AG offers seeds for a wide range of vegetable and herb varieties as well as ornamental plants, both for commercial cultivation and home growing.

<http://www.kultursaat.org> Kultursaat e.V., Verein für Züchtungsforschung und Kulturpflanzenerhalt auf biologisch-dynamischer Grundlage (Association for bio-dynamic breeding research and preservation of cultivated plants), on-farm working plant breeders, the varieties are administratively checked and inscribed in the name of the association so that the property rights on the varieties remain with the non-profit association.

<http://www.arche-noah.at> from Austria, large organisation with its own collection and a large network of on-farm seed guardians.

<http://www.kokopelli.asso.fr> Network of organic producers who conserve heirloom varieties. 6000 association members, out of which 1000 produce and conserve seeds themselves. In addition, training for amateur gardeners, botanical knowledge, exchange of experience, seed production. An important step: cooperation with a nature reserve.

<http://www.dreschflegel-saatgut.de> Dreschflegel e.V. is a pool of socio-politically active people with an interest in ecology and in particular the wish to conserve a large diversity of agricultural crops. Die Dreschflegel GbRmbH is a pool of certified organic farms for the reproduction, breeding and sale of seeds.

<http://www.cenesta.org>, CENESTA (Centre for Sustainable Development & Environment) is primarily active in Iran and south west Asia.

<http://www.icarda.org>, ICARDA (International Center for Agricultural Research in Dry Areas) in Aleppo, Syria, is one of 15 genebanks and research centres that are strategically distributed over the whole world and belong to the Consultative Group on International

Agricultural Research (CGIAR).

Podium 3

The special importance of wheat and the present risk to its genetic basis

Prof. Abdullah Jaradat, Iraqi scientist presently conducting research in the USA, Jean François Berthelot, farmer and activist of the French movement of the „farmers bread bakers“, Lucca Colombo of the „Genetic Rights Foundation“ in Italy and Annemarie Volling of the Arbeitsgemeinschaft bäuerliche Landwirtschaft (AbL, working group for peasant agriculture) of Germany participated in the podium.

Wheat (especially the varieties durum wheat and bread wheat) is nowadays one of the most important basic food in the world. The first wheat varieties that were cultivated originated from wild plants in Mesopotamia and were the result of a genetic evolution that can be roughly traced back over ten thousand years. Mesopotamia is the region of origin of a whole series of cultivated plants that now constitute the basis of our modern food stuff. This can be put down to its different climates, soil fertility and a very early development of sedentary life styles. We know, since the Russian botanist Nikolai Vavilov (1887-1943) provided evidence for the origin of crops in a few gene centres of the world, that the greatest genetic diversity of a given cultivated plants is to be found in the plant's region of origin.

Prof. Abdullah Jaradat stated that as a result of the ongoing wars in **Iraq**, no public collection of the original wheat varieties exists any longer, so that the diversity of local wheat varieties in Iraqi agriculture has been lost. According to FAO data, up to the year 2002 97 per cent of Iraqi farmers were using their own seeds. The trade embargo that lasted over years, together with the „Food for Oil“ programme, significantly contributed to the import of wheat varieties from other continents. The Iraq wars of the last decades lead to the destruction of agricultural infrastructure, water shortage, soil salination, high environmental pollution and widespread poverty. As if this weren't enough, the government of the US occupation forces decreed the „Order 81“ which forces farmers to grow internationally registered varieties only, i.e. varieties of the major seed corporations, including for the most part patented and genetically manipulated varieties.¹ Abdullah Jaradat concludes: The genetic diversity of wheat is a condition for the crop's future survival and ability to adapt to changes in nature. This adaptation does not take place in frozen genebank collections and is only possible if the crop is grown in functioning farmers' structures.

In Europe too, the diversity of regional farmers' varieties has practically disappeared, which is why the Network for Peasant Seeds (RSP), with its working groups on fruit, wine, produce and cereals, came to life in **France** in 2003. **Jean-François Berthelot** is part of the working group on cereals which identifies itself as the network of „farmers bread bakers“, but in which several researchers also work. Farmers within this movement swap their regional heirloom varieties, observe how these behave in other regions and select on this basis new varieties that have adapted to their farm or region. The French research institut INRA (National Institute for Agricultural Research) had already long concerned itself with the question of how the products of organic agriculture could be used in the food industry such as the noodle production for instance, and a research project cooperating with farmers dealt with this question. Problems however popped up during this project, as the farmers did not have a sufficient voice, and it was eventually unclear whom the new developed varieties would

¹ Prof. Jaradat did not make this point, it was added by the assembly. It bases among others on the Resolution of 12 laureates of the alternative Nobel Prize (Right Livelihood Award) „Der Irak ist eine Wiege der Zivilisation und der Landwirtschaft unserer Erde / Iraq is one of the world's cradles of civilisation and agriculture“ signed in March 2005, Source: <http://www.uni-kassel.de/fb5/frieden/regionen/Irak/order81.html>

belong to: the farmers or the institute.

The farmers-bread bakers thus set up a new participatory research project where farmers decide what they want to grow and how. This totally changed the research on wheat which had up to now focused on industrial needs. The researchers accepted and respected practically for the first time the „non-scientific“ knowledge and the experience of the farmers; They observed, asked questions and developed their research in this manner; This was a cooperation on equal footing. The project compared the development of different farmers' varieties in several regions, and it observed that the farmers' varieties develop differently according to the region where they are grown. With the adaptation of a variety to other natural conditions, new biological diversity appears. This ability distinguishes the farmers' varieties from the elite varieties which have no ability to adapt anymore. Jean-François Berthelot describes the plants' behaviour in those terms:

„The plants incorporate what happens around them and memorise it in their plant's memory. I think that the environment creates the plant, not just the genetics. The genetics is rather the memory of a history which permitted a plant to function and reproduce itself. However, what strongly influences the plant is the environment where it grows, where the farmer puts it, the stress it goes through and to which it must react. There is no „pure variety“ for the farmers-bread bakers, the plants develop and change continually when they live in a mix. Today's EU seed legislation however prescribes uniformity within a variety and forbids regional farmers' varieties because they are not uniform. That way, the adaptability of cereals was criminalised in the EU, or the farmers were forced to buy seeds from corporations.“

Wheat cultivation has an important economic significance for **Italy's agriculture**. Here too a wide movement was set up for the conservation of traditional wheat varieties, triggered by Monsanto's attempts to sow genetically modified wheat. Wheat has a specific cultural value in Italy, as it comes in nearly all meals as „Pasta“, „Pizza“ or „Pane“ (bread). A wide social coalition was built against genetic experiments with wheat, the „Genetic Rights Council“, where farmers, consumers as well as the food processing industry are represented. The coalition focuses on public communication and research. Universities such as the Bari and the Florence Universities, but also public and private research institutes as well as social initiatives concentrate on the potential impact of genetically modified wheat on the human organism, the economic consequences for imports and exports, questions linked to food security, the impacts on agricultural structures and the socio-cultural implications.

Lucca Colombo quotes Annamaria Rivera of the University of Bari: „Cereals are through and through anthropological. There is no slice of bread that doesn't have technology, politics and religion in it“, which is why the decision to cultivate genetically modified wheat cannot be left to the seed corporations. It has to do with the whole of society.

In his talk, Colombo spoke of eight known experimental field trials with GM wheat in Europe: four in Germany (one trial by the IPK Gatersleben and three trials by Syngenta), two in Spain and one in Great-Britain and in Italy. There is so far no commercial cultivation of GM wheat. Monsanto had an authorization for a variety of Roundup Ready Wheat in the USA and in Canada in 2002, but following public pressure, the authorization was taken back and in 2004 Monsanto withdrew further requests.

In **Germany**, genetically modified wheat was sown in November 2006 on the premises of the IPK Gatersleben genebank. The Ministry for consumer protection and agriculture granted an authorization in spite of 30.000 written objections by citizens, farmers, breeders and food processors against this trial. **Annemarie Volling** of the Arbeitsgemeinschaft bäuerliche Landwirtschaft (AbL, working group for peasant agriculture) reported that the Association for the Conservation and Recultivation of Cultivated Plants (Verein zur Erhaltung und Rekultivierung von Nutzpflanzen, VERN), with the support of a large coalition of farmers' organisations and environmental associations, filed an action against the IPK in spring 2007

on this issue. The genebank's direction denies that this field trial can result in any risk of contamination for other wheat varieties, arguing that wheat is a self-pollinating crop which can thus not be naturally pollinated by other wheat pollen. Originally though, wheat used to be a cross-pollinator, i.e. a plant was mainly pollinated by the pollen of another. It was breeding that resulted in today's crop self-pollinating. Depending on wheat type and variety however, between one and ten per cent of the crops are cross-pollinated. Further, the genebank negates any risks of wheatcorns being carried away, for instance by mice or birds, or the possibility of mixing in the lab or the greenhouse. It also negates the fact that genetically modified rice from a research lab is now all of sudden to be found in the whole world even though rice, just like wheat, is supposedly a self-pollinating plant. Up to now, the VERN association worked in very close cooperation with the Gatersleben genebank. To achieve its goals, such as the revival of wheat variety diversity, the association depends on seeds that are only available in the genebank. It must however be certain that the seed samples from the genebank are guaranteed GM-free, and this isn't the case anymore since the experimental field trials in Gatersleben on surfaces close to which old varieties are preserved.

According to Annemarie Volling, VERN isn't alone to face the problem of unsettled GMO freedom. All plant breeders who maintain a genebank, large corporations set aside, depend on cereal samples from Gatersleben for their breeding work. VERN's call for urgent action aiming for the abortion of the experimental field trial motivated by the upcoming blooming of the wheat was rejected by the administrative court. The court was of the opinion that VERN's rights weren't affected and rejected the case, basing its argumentation on the defence plea of the IPK which designated itself as the owner of the seeds and compared the institution of the public genebank with a hardware store that decides for itself which products to offer its customers. The court writes that a right to receive non-GM seeds from the genebank arises neither from international nor national law. Annemarie Volling further reported that GM-peas were sown on the premises of the genebank in May 2007, which also led to protest: some 75.000 signatures against this trial were handed in to the agricultural ministry. The ministry at least considered it its duty to forbid the genebank to sow heirloom pea varieties in 2007. In this case, the ministry obviously recognises a risk for the conservation of heirloom varieties in the genebank.

Conclusion:

The wheat example illustrates how closely the diversity of varieties is connected to cultural practices – in the story of its genesis as cultivated plant and in today's development. There are several causes to the threats on the genetic diversity of wheat: war and drought induced widespread destruction in the birth region of wheat, the continuous disappearing of farmers' structures, research activities exclusively focused on industrial interests and, as we saw, the irresponsibility of genebanks that engage in experimental field trials with GMO. Finally, all contributions showed how important it is for everyone to be active at all levels: the political, legal, and scientific levels, at genebanks and in hands-on cultivation.

Working Group 1

Who owns the seeds – Public good or collective property?

The WG discussed questions of intellectual property rights on seeds, as well as the possibilities to acquire collective property rights on them. Indeed, even if the question of whether seeds should be a „public good“ or „collective property“ isn't easy to solve, the

reality in Europe is very far from either options.

Over the last decades, property rights such as the patent right and plant variety protection have been continuously expanded and tightened towards broad monopoly rights on the account of farmers.

Many farmers and conservation initiatives have hardly taken any note of these changes at international and national level. It is high time, the WG states, that conservation initiatives, farmers and gardeners take the matter in their own hands in order to defend their interests. So far, even organisations dealing with seed issues lack adequate knowledge of e.g. the international UPOV agreement. This document however establishes the framework for national plant variety protection laws. This means that both the national and international levels have to be considered for the analysis of the present seed situation and for the search for opportunities for actions.

Strategies also have to be developed in order to be able to intervene in political decision making processes. For instance, how can it be achieved that farmers participate as delegates in international UPOV negotiations in order to give a voice to the interests of farmers in this process?

Part of this also involves finding and knowing contact partners within the relevant political committees and delegations – at all levels – in order not to leave the field to the seed corporation lobbies.

Which concrete ways for political intervention are finally chosen will probably be different in each country.

In short, four main points came out of the discussion, which could form a basis for further discussion at the next seed seminar:

1. We should define what the meaning of „collective property on seed“ and „seed as public good“ is in Europe and whether an intellectual property right on seeds can even be asserted.
2. There is insufficient discussion in European countries on the international seed agreement of the FAO.¹ This discussion should take place between farmers organisations and other parts of the so-called civil society.
3. Opportunities for participation have to be developed and improved. More cooperation is necessary between farmers' organisations, farmers and researchers. The question of who owns what rights on the seeds resulting from this cooperation must be resolved.
4. A discussion on UPOV must be led with deputies and delegates at national and international levels. We do not know the delegates who speak for us in the FAO or UPOV.

¹ International Treaty on Plant Genetic Resources on Food and Agriculture – ITPGR-FA (see epilogue)

Working Group 2

Raising awareness for the conservation of biodiversity by using it

By comparing the different situations, it became apparent in the working group that the gap between commercial horticulture and what is necessary for the conservation of biological diversity is far from being everywhere as tragic as in Europe.

In Mali for instance, self-sufficiency and biodiversity conservation go hand in hand. In Tunisia the State provides support, encouraging local networks and local handicraft, among others as regards seeds.

All participants were interested in the question of how to contribute to the education of the people who receive and eat horticultural and agricultural produce. Indeed, specific knowledge and consciousness for the issue of cultivated plant loss can make consumers demand diversity, which would lead to this diversity being grown on the fields too.

One's own enthusiasm for diversity on the field and in the kitchen is an important entry point and indispensable to start a living dialogue with one's personal and social environment. The length of time available for the WG was insufficient to discuss educational concepts and steps for their implementation.

Reference was made to the 9th Conference of the Parties (COP9) to the Convention on Biological Diversity (CBD) that will take place in May 2008 in Bonn, and where among other issues agrobiodiversity will be discussed. Immediately before the COP9, the 4th Conference to the biosafety protocol (MOP4) takes place in Bonn, which will deal among others with GMO liability rules. More information: www.biodiv-network.de

Working Group 3

Possible cooperation between public genebanks and farmer communities

Participants from Portugal, Hungary, Romania, France, Germany, Spain, Chili, Israel and Iran took part in the working group. Many of the initiatives are still very young as the necessity to fetch old varieties out of the genebanks has only become apparent in the last few years. Experiences with public genebanks greatly vary from country to country. In countries such as Portugal, Spain, Hungary and others, the genebanks receive ever decreasing financial support from the State and are gradually dismantled: employees get fired, whole plant collections are destroyed or given away. This is why some of these genebanks are seeking to cooperate with conservation initiatives and farmers' structures.

Other genebanks, especially the IPK Genebank Gatersleben and the Scandinavian Nordic genebank receive a lot of money and completely adapt to the needs of the industry. The information on stocked collections has been digitalised and made accessible world-wide via a large standard genebank information system.

We found out that there is no real access for farmers: Viewing the plants is not allowed, there are hardly any information on where the varieties were originally cultivated and how they were used. The seed samples are small, germinability often bad and because of their long stay in freezers, the plants often need several years before they re-adapt to their environment. The conclusion of the working group was that we urgently need to find new forms in order to take over the collections frozen in the genebanks and return them to a living and used diversity.

Working group 4

Legal basics for seed policy in the EU and the world

Article 17 of Directive 98/95/EC provides the basis for conservation work in the countries of the European Union. The working group discussed two processes linked to this: the French law suit against „Kokopelli“, concerned with the distribution of varieties that are not inscribed

in the French variety catalogue, and a EU lobby initiative dealing with the upcoming implementation of article 17, 98/95/EC into a regulation.

Implementation of Directive 98/95/EC

European Directive 98/95 rendered obligatory the inscription of all commercial plant varieties in the EU catalogue of varieties, a laborious and expensive process favourable to large seed producers.

At the same time, the „conservation variety“ category was created, and the European Commission and the Member States were called upon to create a separate legal framework that enables farmers and gardeners to conserve and reproduce plant varieties in danger of extinction. This directive has not been implemented so far.

The European Commission is at present working on the Directive for the marketing and use of „conservation varieties“, the draft of which is very restrictively designed. The „conservation“ seeds would only be allowed to be grown in their region of origin and the allowed cultivated amount would be extremely limited in terms of surface and quantity.

This Directive project, instead of supporting and facilitating conservation work, would make it more difficult and restrict it. The protection and conservation of these plant varieties would be endangered and access to these invaluable cultural assets would be to a large extent made impossible for the better part of farmers and gardeners. The adoption of this Directive represents an important threat for the conservation of plant diversity in Europe.

The Agriculture Committee of the European Parliament has already negotiated twice with the relevant EU Commissioner, M. Kyprianou. It appears urgent to delay the adoption of this Directive in order to gain time for a new debate.

It would also be desirable that further committees address this issue, especially the Committee on Environment and the Committee on Civil Liberties, as this decision will have a direct impact on the basic rights of citizens to dispose freely of their seeds.

The text for a letter to the European Commission was presented and discussed, but not adopted by the whole assembly. Examples of letters in English and French are available on internet at www.biopiraterie.de/

The „Kokopelli“ law suit

„Kokopelli“ is an association with 6.000 members, and it produces and distributes more than 2.500 farmers' varieties of vegetable, cereals, herbs and flowers. „Kokopelli“ organises training courses, publishes a yearly handbook for seed saving, maintains seed exchange networks and supports numerous farmers' initiatives throughout the world. This way, seeds that are only seldomly grown are prevented from disappearing.

Kokopelli was taken to court in 2004 „on the charge of distributing illegal seeds“, and this by the half public organisation GNIS and the trade association of seed breeders FNPSF. The court found Kokopelli's president, Dominique Guillet, not guilty of any of the charges and dismissed the case. The court based its decision on the EU seed Directive 98/95. Article 17 of this Directive calls on Member States to create exemptions for the conservation of ancient farmers' varieties, so-called „conservation varieties“.

However, as France ratified the Directive but without this article, the appeal court of Nîmes was able to condemn Dominique Guillet on 22 December 2006 for distributing unregistered seeds, fining the Association Kokopelli 20.000 euro. As a last resort in France, Kokopelli will go to the court of cassation and – if this is necessary afterwards – take the French State to the European court for the non-implementation of EU Directive 98/95. The Nîmes verdict created a jurisprudential precedent which will probably induce further lawsuits. This could mean the

financial end of Kokopelli.²

The costs for the listing of varieties in the catalogue of varieties in no way match the economic significance of heirloom varieties and far exceed the capacities of small associations. The inscription of a cereal variety for instance costs 8.000 for the first ten years. This expensive fee, also linked to the high number of heirloom varieties, makes their inscription impossible.

This working group formulated the demand for sensible European regulation related to the non-restrictive use of the variety of farmers' breeding, which was included in the final declaration.

Working Group 5

Resisting the tightening of seed legislation in the EU and the world: UPOV 2011?

In order to conserve and further develop seeds, plant variety protection laws are decisive. The UPOV, „International Union for the Protection of New Varieties of Plants“, defines international standards. After Germany, the Netherlands and Great Britain had created this organisation for the harmonisation and strengthening of laws on plant breeding in the 60s, further EU-countries and other industrial States joined in the course of the 70s and 80s. From 1991 on, the UPOV also extended to eastern Europe and the „developing“ countries. The 1991 revision of the UPOV agreement – the only version new members can join – especially pushed plant variety protection (PVP) closer to patent laws and degraded ancient farmers' rights to keep part of their harvest for planting the next year to (still) tolerated exceptions. The threat of a further tightening looms in the coming years with „UPOV 2011“ potentially completely annulling the ancient rights.

The industry is not yet satisfied with the opportunities offered by the 1991 Agreement and launched its lobby machine to close up the last „loopholes“ in plant variety protection. Should this assault be successful, this would mean the end of farmers' seeds, probably also the end of free access to variety protected material for plant breeding, and altogether a tightening with longer periods of protection, a stricter enforcement of intellectual property rights and a more comprehensive monopoly.

The various steps of the UPOV agreements were presented during the WG 5 on the basis of a comparison made by „Grain“ taken from the report „The end of farm-saved seed“¹:

	UPOV 1961/1978	UPOV 1991	Next UPOV?
Coverage species	Optional, minimum any 24 species	Must cover all plant species	Must cover all plant species
Coverage uses	Propagating material	All plant material, optionally products	All plant material and products
Period of protection	15–18 years	20–25 years	25–30 years
Use for breeding	Always allowed	Always allowed, but no	No use until after 10

² A petition for „Kokopelli“ can be found in German at http://www.attac.de/wtal-agrar/Petition_allemand.pdf, in French at <http://www.attac.de/wtal-agrar/petition-semences.pdf> and signed online (in French only) at <http://www.univers-nature.com/signez/?code=cat>

		new PVP for „essentially derived varieties“	years, then only with registration and royalty to the owner
Use farm-saved seed	Always allowed	Allowed only as optional exception and only if royalty paid on seed	Never allowed
Application procedure	Separate for each country	Separate for each country	One international application for all countries
Double protections with patents	No	Yes	Yes

¹ (<http://www.grain.org/briefings/?id=202>)

Working Group 6 Training for live plant conservation

In this working group, people with great every day life knowledge and experience with seeds talked together with people who have so far not had much to do with agriculture and gardening and wanted to learn about growing and seed conservation.

People with a lot of training experience particularly emphasised how important the exchange of experience is for learning, and the fact that no expert knowledge is necessary for conservation work.

Here is a list with the point that appeared most important to us:

1. International cooperation and free knowledge exchange,
2. Recovering traditional knowledge,
3. Creating partnership sustainability and operating within it,
4. Pollination biology,
5. Breed selection methods,
6. Improving food quality ,
7. Plant morphology,
8. Population size and dynamics,
9. Seed born pathogens,
10. Seed production for various crops,
11. Methods for experimental field trials,
12. Information for farmers/ cultivators and consumers,
13. Trainings on legal frameworks.

The WG created a working group that will continue to work on the issue of training. All those interested in participating can contact:

Peter Zipser, Arche Noah, Austria, peter.zipser@arche-noah.at;

Bernd Horneburg, University of Göttingen, Germany; bhorneb@gwdg.de;

Helena Sanchez Giraldes, Heritage Seed Library, England; Hsanchez-giraldes@hdra.org.uk

Working Group 7

Creating an international emergency committee to save the varieties in Gatersleben

In reaction to the GM trials in Gatersleben, the working group 7 discussed the establishment of an international emergency committee for the conservation and protection from GM of wheat diversity, and formulated a declaration on the subject. This declaration was adopted in the plenary session as one result of the seminar:

„We have absolutely no guarantee that the trials that have been conducted for the past ten years with genetically modified plants in the laboratories of the genebank have not already lead to the contamination of the conservation stocks. This has however become much more likely with the field trials. If we assume that the first experimental field trials with GM wheat took place last autumn, then all wheat varieties that were sown at the same time for conservation on the fields in Gatersleben are directly compromised – both winter and summer wheat.

The genebank still stocks seeds of all these varieties that are not threatened by contamination.

We aim to grow and conserve as many different varieties outside the genebank and thus protect them from GM contamination.

We are thus establishing an international emergency committee to implement this aim.

We request from the genebank management that it provide us with an exhaustive list of the affected wheat varieties with an indication of the origin of each variety. The emergency committee will endeavour to contact farmers, gardeners and private individuals in the countries of origin who are willing to plant, cultivate and harvest seed samples for the conservation of the varieties. We expect from the genebank that it makes these samples available to us with the guarantee that they have not been mixed with the upcoming harvest.

As a consequence of this initiative set up on short notice, we expect a broad public discussion on the necessity to develop alternatives to genebanks for the conservation of plant varieties.

We additionally call on the IPK in Gatersleben:

Given the likelihood of contamination of the cereal seeds stocked by the IPK due to the actual GM experiments with transgenic wheat in fields, an amendment should be included in the respective Material Transfer Agreements when distributing cereal seeds of this year, mentioning that no guarantee can be given that these seeds are not genetically modified.

We further expect that given the significance of the genebank's collection for the future of agriculture, the whole IPK area and its surroundings be declared GM-free zone.

In addition to these practical steps for GM-free conservation and use of crops, we suggest the following:

In May 2008, Germany will host the 9th Conference of the Parties to the UN Convention for Biological Diversity (CBD) ¹. This convention, a result of the 1992 Conference on

Environment and Development in Rio just like the climate convention, is meant to regulate the conservation and sustainable use of biological diversity. An international protocol on biosafety is annexed to this convention that sets minimum standards for handling genetically modified organisms – the so-called Cartagena Protocol. Directly before the CBD conference, the 4th Meeting of the Parties² of this protocol will equally take place next May in Germany. The precautionary principle is embedded in the Cartagena protocol, and states that even the use of GMOs can be banned in the Member States even without scientific evidence that their use is linked to a risk. We demand that the participants to the COP9 and MOP4 put the genetic experiments of the genebank in Gatersleben on the agenda, as this field trial in direct proximity of Germany's largest and most significant collection of heirloom crops is an obvious attempt to make an example which can have unpredictable negative consequences also for genebank sites in other countries.“

While discussing this text, numerous participants emphasised that we do not intend, nor are we in a position, to take over the function of a genebank.

If however we notice that the State does not attend to its duties and does not guarantee GM-free conservation in genebanks anymore, we would be forced to take on responsibilities and take threatened plants out of the genebank.

We must address the pressing question of how to organise a living conservation of crops without artificial concentration in genebanks. Even if a genebank does not conduct GM field trials on its premisses, it receives, as is the case for instance in Gatersleben, every year several hundred new seed samples and is thus continually at risk of contaminating the stocks with genetically modified material. What is particularly alarming is that there is hardly any real awareness of this problem in the genebank. A centralised structure for the collection of crops is therefore not appropriate anymore. It is necessary to develop decentralised forms of live conversation once again.

The establishment of the emergency committee thus has several aims:

- First, the concrete action aiming at the conservation of the threatened wheat varieties in Gatersleben should raise awareness on the fact that the genebank presently does not attend its primary duty of conserving plant diversity.
- At the same time, the emergency committee wants to develop the cooperation and exchange of experience among existing conservation initiatives in the different countries on the basis of this concrete challenge.

¹ Conference of the Parties - COP9

² Meeting of the Parties – MOP4

Working Group 8

Set up and future organisation of the European seed network

Already during the first European seed seminar in Poitiers, France, the idea came up to establish a European network that would commit itself to the living, dynamic conservation and development of heirloom and local varieties in gardens and on farms. At the time and as a first step, an informal network of organisations willing to build up exchange among one another and develop common strategies at the European level was set up. When they met during the second seed seminar in Bullas, Spain, they confirmed their intention to found a common organisation. 24 participants from Germany, France, Great Britain, Italy, Austria,

Portugal, Spain, Hungary and Romania discussed the purpose of a common European organisation as well as a draft for its charter.

With the last three seminars, all got to learn how different the situations and laws are from one country to the next, and that the networks have different ways of organising themselves and of working. A central European organisation that would want to implement a strategy in all countries is thus not conceivable.

The European organisation should thus

1. encourage information exchange among its members and with partners outside Europe,
2. enable common activities ,
3. provide information for the public,
4. strengthen and link national initiatives,
5. strengthen representation at the level of international institutions.

First steps in this direction have already been undertaken: In some countries, national networks have been set up. The wish for more cooperation in the areas of training and awareness raising for cultivated plant diversity has been expressed (see WG 2 and WG 6). The emergency committee founded in Halle for saving heirloom wheat varieties coordinates as a common activity the rescue of old wheat varieties from GM-contamination.

Another aim is to get a stronger representation in those international bodies that have an impact on farmers' rights, such as the FAO accord on phylogenetic resources, or the adoption of the EU Directive on conservation varieties.

Some points were agreed upon: There will be a yearly meeting of all members, the next one is planned to take place in September 2008 in Italy. Further, the working group participants came to an agreement on membership, the executive, secretariat and financing as well as on the further proceedings. They aim for the official registration of the European organisation by Autumn 2008. The participants appointed a transitional executive instructed by the plenary to continue preparing the founding of the organisation until the European organisation has been registered.

Further steps undertaken since the seminar in Halle:

Between June and August 2007, the charter was discussed within the various organisations. It became clearly necessary to organise a work meeting, which the Italian seed network Rete Semi rurali organised in Rome on 3 November.

The participants in Rome considered a common conceptual understanding and a common political approach to be a basic necessity for a European coordination. They thus decided to slow down the speed of the creation and first to conduct a debate on common understanding and self-conception in the various organisations and countries. The following four aspects are at the basic heart of this debate:

- Common understanding on what farmers' seeds actually are
- How should farmers participate in the European coordination ?
- What is important to us? Collective (farmers') rights in dealing with seeds, or seeds as a public good?
- What do we want? Controlled exchange or free market?

The organisation of the internal communication was also clarified and the participants decided to open the creation process to interested seed initiatives and individuals who had up to then not been involved.

Public programme with seed market and more

Whom do seeds belong to?

This was the theme of the colourful and diverse programme which the locals were invited to join on Sunday afternoon. In the large auditorium, a series of talks took place: the famous potato farmer Karsten Ellenberg spoke on the efforts to conserve the potato variety Linda. Georg Jansen of the Arbeitsgemeinschaft bäuerliche Landwirtschaft (AbL, working group for peasant agriculture) and of the collective against royalties (IGN, Interessengemeinschaft gegen Nachbaugebühren) reported on the efforts of seed companies to further expand the seed market and their share of it, as well as to increase their profits. They additionally try to impose royalties for the seeds kept from the harvest for planting the next year, and to oblige cultivators to provide information on their cultivation. His conclusion and call: „Resistance is worth it!“

Martina Bavec, Professor for organic agriculture in Slovenia, gave an account of the seed situation for organic farming there and on the increasing globalisation in this area. Jean-Pierre Bolognini of the French farmers-bread bakers described their work of many years to find, further develop and distribute again traditional, regional wheat varieties. And Maria Isabel Manzur of Chili from the Fundacion Sociedades Sustentables (Foundation for sustainable societies) told her interested audience about the seed situation in Chili, marked by the mostly uncontrolled production of genetically modified seeds.

The Pädagogischen Hochschule (School of Education) presented in the afternoon in the court of the Frankische Stiftung in Halle an exhibition and information stands on biological diversity in general and wheat diversity in particular. The working group orchard (AG Streuobst) provided information on apple varieties and had brought along delicious apple juice to taste. A tasting of bread with traditional wheat varieties of the Association for the Conservation and Recultivation of Cultivated Plants (VERN, Verein zur Erhaltung und Rekultivierung von Nutzpflanzen) attracted many curious people. Arche Noah, Kokopelli and Reinsaat had brought lots of different seeds for a seed swap. The international seminar guests but also local visitors and hobby gardeners from Halle studied these with interest and took advantage of the opportunity.

The sunny weather, the lively music of band „Dr. Bajan“ (who enticed to dance with their „Russian speedfolk“), a generous donation of organic beer and many participating and helping hands all contributed to the good and relaxed spirit of the day.

Demonstration and rally in Gatersleben

On 21 May 2007, some 300 environment activists, farmers and political activists held an international rally in front of the Gatersleben genebank after a demonstration had walked past the local genetic engineering companies. Representatives from Germany, Switzerland, Austria, France and Chili emphasised the importance of the Gatersleben genebank and the safety of the genebank samples, and demanded that all genetic engineering experiments in and around Gatersleben be immediately banned due to a much too high contamination risk. Farmers' unions, gardeners, researchers, beekeepers, bread bakers, doctors, political activists and representatives of seed organisations, also from Tunisia and Mali, unanimously and clearly criticised the development of the genebank and biotechnology-friendly policy at regional, national and international levels.

Jürgen Holzappel of the European Civic Forum handed the director of the Gatersleben IPK genebank, Prof. Dr. Graner, the declaration (see below) of the 3rd European seed seminar which had previously taken place, its main demand being: „Let's liberate diversity!“ The genebank was invited to provide a list of all the wheat varieties reproduced in the Gatersleben genebank between 2006 and 2008, and to hand out non GM-contaminated samples of these varieties.

To underscore the call for a policy banning GMO and supportive of biodiversity-friendly agriculture, Annemarie Volling of the working group for peasant agriculture (Arbeitsgemeinschaft bäuerliche Landwirtschaft, AbL) summarised the various speeches held during the rally and transmitted them as an open letter to several politicians.

See also: <http://www.biopiraterie.de/index.php?id=391>

Final declaration of the 3rd European seed seminar, Halle/Saale, 18-20 May 2007

Let's liberate diversity!

The experiments with genetically modified plants in labs and on fields of the Gatersleben genebank, one of the largest crop collection in the world, prompted 150 farmers, gardeners, plant breeders and representatives of genebanks and initiatives for the conservation and use of plant diversity from 25 countries and four continents to gather in Halle from 18 to 20 May 2007.

These experiments mean that the genebank of the institute of plant genetics and crop plant research (IPK) in Gatersleben does not attend to its primary duty, i.e. the safe conservation of plant diversity, but in fact exposes these plants to a risk of contamination by genetically modified plants. The IPK, as a public institute, isn't the only example of how industrial nations do not consider it their duty anymore to protect the diversity of cultivated plants and domestic animals. In many countries, genebanks part, allegedly for financial reasons, with whole varieties of cultivated plants that now have no economic significance; Sometimes the collections are entirely dismantled.

This development has severe consequences for us all. The States of rich countries bear a responsibility that stretches way beyond their national borders. The genebanks that have been set up here, such as the one in Gatersleben, host plant collections from every country in the world that have for the most part been compiled during the colonial occupation of these countries; These are conserved exclusively thanks to tax money. In discrepance with this situation, the present IPK management justifies the genetic engineering experiments in Gatersleben with the argument that the plant collections are the property of the genebank, who is therefore at liberty to dispose of it as it sees fit.

We are opposed to this. Some 10.000 years of agrarian culture created a near limitless wealth: with varieties, breeds and species too numerous to count, cultivated plants and domestic animals form the living culture heritage of humanity. The conservation of this heritage conditions the future alimentation of humanity. It belongs to all on the condition that the collective rights of those communities that have bred and conserved the varieties up until now be respected. We support the legal action against the Federal Office of Consumer Protection

and Food Safety (Bundesamt für Verbraucherschutz und Lebensmittelsicherheit) but legal steps alone are not enough.

Throughout the world, people have started to oppose the privatisation of their plant diversity. In India, women unite to preserve their local plant environment for their village communities with regional, self-organised plant exchange. They have cast the branches of transnational seed corporations out of their regions. In Mexico, farmers protest against the patenting of their traditional corn varieties by US corporations. In Mali, the farmers' assembly decided not to admit genetically modified plants in their country and to protect the local cultivated plants as the basis for their food sovereignty. In Europe, initiatives for the recultivation of heirloom varieties multiply. Farmers claim their immemorial right to plant the seeds of their harvest, freely swap, use and sell them.

In Halle, we discussed on this basis our answers to the increasing and systematic neglect of genebanks.

The preservation of cultivated plants should be in the hands of farmers and not-for-profit breeders. This is our answer to the political intention of further expanding the breeding rights of large companies and drastically limiting farmers' rights. The multinational seed industry is attempting to control the world's food production. With the help of agro-genetic engineering, patents on plants and animals, the 1991 UPOV agreement, dispositions in seed laws and the terminator technology (sterilising seeds), they intend to turn farmers into cheap and dependant commodity suppliers. They want to take possession of the experience of farming and gardening breeding and exploit it in agro-industrial structures.

We will not let this happen!

Seeds are life and for us, seeds are a public good of the peoples.

We stand up:

- for biological diversity, to reinstate food sovereignty in the world and be able to face the consequences of climate change,
- for the right to resow seeds, without any restriction or royalty,
- for the right to non-GM agriculture and food production,
- for the right to use seeds of regional and farmers' varieties,
- for the unrestricted right for all to sow, reproduce, buy, sell, swap, give away and distribute the seeds of these varieties,
- for the collective rights of communities to protect their local and farmers' varieties, ban the introduction of manipulated and/or dangerous seeds in their region for the benefit of local biological diversity,
- for a ban on patents on life.

Taking responsibility for Earth, for the people, for our nature and environment and the coming generations, we demand:

Liberate diversity!

Freedom for seeds!

On this basis, we decided the following in Halle:

- The creation of a European coordination for farmers' seed and varieties.
- The creation of an international emergency committee for the conservation of the wheat varieties that are threatened by GMO contamination in Gatersleben (see working group 7).
- We request a sensible European regulation that guarantees the diversity of farmer bred varieties and their unrestricted use bearing in mind the collective rights of communities.
- We call on the Gatersleben genebank to mark the harvest of all samples when traditional populations and transgenic plants of the same genus are grown or regenerated on the premises of the institute in one vegetation period. For the year 2007, this applies to e.g. all summer and winter wheats (*Triticum*). This should also be mentioned when handing out samples.

Halle/Saale, 20 May 2007

What's happened since then...

With diplomacy in Rome:

International seed agreement – institutional biopiracy?

The international exchange of seeds is governed since 2004 by the so-called „International Treaty on Plant Genetic Resources for Food and Agriculture“ (ITPGR-FA). The Governing Body, consisting of all 115 contracting parties to the treaty, met from 30 October to 2 November 2007 in Rome, however without coming to any concrete results. The governments failed to commit the funding necessary to fulfill the treaty obligations, especially the monitoring of Material Transfer and the rule on Benefit Sharing.

This particularly scandalised the farmers organisations and other civil society groups of the whole world who had been invited to the meeting and traveled at their own expense. Their declaration states among others that: *„Farmers cannot ensure the continuation of their indispensable contribution to the conservation and renewal of biodiversity without having recognition and respect for their rights of reusing, conserving, protecting, exchanging and selling their seeds and their right to freely access genetic resources. Seeds produced on farm, and their informal exchange, are the basis of this contribution, but are unfortunately forbidden in a number of countries which are signatories to the Treaty.“*

Due to the lack of results, they called upon the secretariat of the treaty to suspend the treaty and material transfer, in particular of crop germplasm. The treaty, they argue, forces the transfer of farmers' seeds towards the labs of the seed breeders in the north, while sharing out the financial benefits of this transfer isn't enforced: a form of international biopiracy.

The declaration of the civil society organisations present at the conference and the final press release are documented by „Grain“ (<http://www.grain.org/bio-ipr/?id=531>).

Without diplomacy in Brasil:

Leader of the Landless Movement murdered in Brasil

150 farmers of the Landless Movement MST (Movimiento de los Sin Tierra) in Brasil have for the second time occupied a site of the seed corporation Syngenta in the southern State of Paraná in order to protest against the illegal cultivation of genetically modified corn and soya. On 21 October 2007, 40 armed men from a „security company“ opened fire on the farmers. A leader of the Landless Movement was murdered with two shots in the chest, six other farmers wounded, one woman was badly abused and remains in a life-threatening situation. Syngenta reacted to this crime stating that the corporation had nothing to do with the „security company“

Without diplomacy in Europe:

Kokopelli condemned for illegal seed distribution

On 14 January 2008, the association Kokopelli was condemned in appeal as part of the legal battle led by the seed company Baumaux. Baumaux accused Kokopelli of “unfair competition” as many of the vegetable varieties distributed by Kokopelli are not listed in the French variety catalogue, so that Kokopelli fraudulently obtained an unfair advantage by saving on the inscription costs.

Kokopelli's approach is however an entirely different one: This association for the conservation and recultivation of heirloom vegetable varieties does not trade seeds commercially but is rather devoted to the conservation and dynamic development of biodiversity.

The highest French court nevertheless condemned Kokopelli to pay Baumaux indemnities of 12.000 Euro. In addition, it fined the association 17.500 Euro for illegal seed distribution and another 5.000 Euro for a public information campaign on the “dangers” of Kokopelli. A dark day for the conservation and recultivation of heirloom varieties in Europe.

The organisers

The German „**BUKO Campaign against Biopiracy**“ (www.biopiraterie.de) has been working since 2002 against the private appropriation of genetic resources by seed, pharma and food corporations, aiming at supporting initiatives by traditional and local communities as well as smallholder farmer groups. For this purpose, it disseminates information, e.g. via the newspaper supplement „Kaperbrief“, the publication of a book in German on biopiracy and resistance (*Grüne Beute. Biopiraterie und Widerstand*), stands on church days in 2003 in Berlin and 2005 in Hannover, numerous talks and seminars; it organises creative protest actions and individual campaigns.

These included for instance in 2003 „Nibble against biopiracy“ (Naschen gegen Biopiraterie), from 2004 to 2005 „Resistance is burgeoning“ (Widerstand keimt auf) against the implementation of the EU biopatent Directive, participating in „Free seeds rather than dead harvests“ against the terminator technology in 2005/06, participating in protest activities against EPAs and against the G8 with a focus on agriculture in 2007.

The Campaign considers the neglect and destruction of genebanks resulting from contamination and GM field trials to be a form of biopiracy. When plant varieties disappear from public collections, these are silently privatised if they remain in private collections.

The „**Interessengemeinschaft gentechnikfreie Saatgutarbeit**“ (IG Saatgut, www.gentechnikfreie-saat.de) is an international network of conservation and breeding organisations as well as seed companies both commercial and non-profit. When breeding new or preserving old varieties, these seed initiatives rely in their conservation work on breeding and reproduction methods that correspond to a holistic approach to the plant. They are committed to keeping their seeds free of genetic modification for years to come. A non-GM diversity of cultivated plants forms a basis for breeding and food in the future. They also aim at securing in the long-term the existence of initiatives and companies involved in growing, conserving, developing, breeding and using non-GM cultivated plants.

The following associations, among others, are part of the IG Saatgut:

- Arche Noah <http://www.arche-noah.at>
- Dreschflügel e.V. <http://www.dreschflügel-saatgut.de>
- Kultursaat e.V. <http://www.kultursaat.com>
- Verein zum Erhalt der Nutzpflanzenvielfalt e.V. (VEN) <http://www.nutzpflanzenvielfalt.de>.

The „**European Civic Forum**“ (ECF, www.forumcivique.org) was established in the euphoria of the 1989 changes in eastern Europe and just one month after the fall of the Berlin wall. The initiative was taken by people from east and west who had for the most part known one another for years and were active in groups and organisations such as the CEDRI (European Committee for the Defence of Refugees and Immigrants), free radios, or the European Cooperative Longo Maï. The main aims were to develop links of friendship and cooperation between people in eastern and western Europe, in order not to leave the opening of eastern Europe to economic interests, international institutions and western governments. The European Civic Forum regularly works on agricultural issues. Articles on the subject are available online in the monthly publication „Archipel“.

Réseau Semences Paysannes (www.semencespaysannes.org), Network for Peasant Seeds, France. With the expansion of GM seeds, many farmers discovered they had to commit for their seeds if they wanted to remain independent. In 2003, several hundred farmers and gardeners met in Auzeville, France, and established the *Réseau Semences Paysannes*, bringing together various initiatives committed to the conservation and defence of cultivated plant diversity and to a free access of farmers to this diversity: national organisations of representatives of organic farmers, small companies and smallholder farmers who produce seeds, representatives of nurseries, associations for the development and conservation of biodiversity. The network is committed to the protection of regional farmers' varieties, as well as to their scientific, technical and legal recognition.

The proceedings of the 3rd European Seed Seminar in Halle are available online and can be downloaded as a pdf file at <http://www.biopiraterie.de/index.php?id=392>

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Country reports

The participants were requested to provide reports on the situation in their country for the preparation of the seminar in Halle. These reports were handed out during the seminar and enabled participants to get an overview of the situation in the various European countries.

At <http://www.biopiraterie.de/index.php?id=389> you will find the reports for the following countries:

Germany
Austria
Georgia
Greece
Slovenia
Bulgaria
Portugal
Italy
Russia
Chili
Mali
Switzerland
Tunesia

[Zitate:]

Seite (in dt. pdf-Broschüre)	En. Übersetzung
1	There can only be crop diversity with cultural diversity.
3	Biodiversity is beautiful, it's wonderful, it must be thought globally but implemented locally.
6	The only tool we can use against multinational corporations is the clarity of our collective thoughts.
10	There is no coexistence without contamination. There are no hermetic borders between biological matters.
12	Seeds are life, and this shouldn't be left over to the State.
19	It's about living diversity, as opposed to the museum-type freezer conservation of genebanks.
23	It is mostly women who throughout the world guard and preserve the seeds.

28	I've fallen in love with cereal plants: Because of their beauty and because they remind me of all the friends these seeds have given me.
34	Seeds belong to no one. It is an effect of nature, it's a world heritage.
36	Variety purity is a hallucination, variety purity doesn't exist. We farmers know exactly that the plants develop, move, adapt.
37	For me, the genebank's collections are biopiracy aiming at creating dependence.
38	Our fields are the scene of an intensive, living activity, of a luxurious, living genebank.
41	It's out of the question that we commercialise seeds. We give seeds away and swap them totally illegally, but legitimately.
43	Goethe, as a botanist, once said: Observe, compare and dream! In our network, we dream of the plants with which we want to live...
44	In our collections of hundreds of wheat varieties you will find red wheat, blue wheat, black wheat, yellow wheat, pink wheat, bearded wheat, hairy wheat, wheat with this type of beard, others with that type of beard...
47	It's about giving back its right to agriculture and its 12.000 year long history, and stopping the misdevelopments of the last decades.
49	The modern wheat varieties are grown to produce bread with big bubbles, this horrible French baguette that can be neither kept nor digested.
60	I hope that every one of us goes home with a new enthusiasm so that we can create a European collective of "voluntary sowers".
68	Quotes from participants.

[Bildunterschriften]

Seite (in dt. pdf-Broschüre)	En. Übersetzung
5	Delicious food during the gathering outside in the inner courtyard of the Fränkische Stiftungen in Halle.
11	Waiting for the demonstration in Gatersleben
12	Impressions from the lab in Gatersleben
18	Plenum in the auditorium of the teacher training school, Halle
49	Diversity of cereals on the seed market
51	About 300 people demonstrate in Gatersleben