### SWISSAID சீர்

### **FARMERS' SEED,** the regulatory framework, and seed policy in Niger

**SWISSAID** the Swiss foundation for cooperation and development, is a non-political, non-religious charity set up in 1948. It is active in nine countries, where it supports projects mainly in the fields of agroecology, natural resources, civil society, water supply and women's empowerment. Projects are run directly by local coordinators from offices abroad.

info@swissaid.ch www.swissaid.ch

This brochure, designed by the association BEDE (Biodiversité, Échanges et Diffusion d'Expériences), came out of the 'Étude critique du cadre juridique et des dispositifs politiques sur les semences au Niger' study conducted by SWISSAID and Alternative Espace citoyen in 2016. (Since then the final version of the 2016 Catalog of ECOWAS-UEMOA-CILSS Species and Plant Varieties has been published, but its content does not change/influence the findings and recommendations of the study or this brochure). Photo credits: SWISSAID / BEDE.

#### Introduction

For millennia, smallholder farmers all over the world have been the custodians of local communities' knowledge of cultivation and its endogenous genetic heritage. It is smallholder farmers who have cultivated, reproduced and exchanged their own seed, and have thereby created an incredible diversity of varieties. In most developing countries, it is these farmer managed seed systems that provide the seed for the majority of farming families while also providing security for their food supply. This is the case, notably, in Niger, where more than 60% of farmers select their own seed, store it, distribute it and hand it down from one generation to the next. For millennia these mechanisms have helped to build a system that guarantees food security, health and ongoing resilience in the face of climate change.

With the seed industry gaining ground, traditional farmer managed seed systems in the South are under growing pressure. Most countries pass laws on seed without the knowledge and/or effective participation of the smallholder farmers directly affected. These laws restrict the use of smallholder farmers' seed in favour of trade in and protection of industrial seed varieties.

Combating ignorance with information and training is one of the key solutions for confronting the powerful seed industry lobby. This is why SWISSAID, with BEDE's support, has developed this brochure to raise awareness among smallholder farmers in Niger and the organisations representing them. This brochure explains in a single document the legal framework and the policy guidelines in effect in Niger. The recommendations made in the brochure have already been publicised on Niger's Raya Karkara agroecology platform, which works to protect traditional farmer managed seed systems threatened by the seed industry.

SWISSAID April 2019

# Smallholder farmers' seed, the regulatory framework, and seed policy in Niger

#### Contents

Key role played by traditional farmer managed seed systems in Niger
Coexistence of two seed systems
A new regulatory framework built for industrial seed8
Influence of the international context on changes to legislation9
Regulations preventing the sale of smallholder farmers> seed 10
Regulations authorising the privatisation of seed 11
Inadequate biosafety regulations 13
Unenforced regulations protecting smallholder farmers> rights 14
Issues requiring clarification in national regulations15
Towards the effective participation of smallholder farming communities in drafting and implementing seed laws
Civil society initiatives

### Key role played in food sovereignty by farmer managed seed systems in Niger

In Niger, three-quarters of all food is produced by smallholder farmers, the majority of whom select and produce seed themselves in their own fields. They practice smallholder agroecology, regularly exchanging seed with their neighbours to improve the diversity of their varieties.

For thousands of years, traditional farmer managed seed systems have provided food for generations of Nigeriens. These seed systems differ according to the type of crop and the locality. Unlike the industrial seed sector, which separates seed production from food production, traditional farmer managed seed systems perform both functions, enabling them to adapt their varieties to new needs on a regular basis.

Nigerien farmers have internationally recognised expertise in growing millet, sorghum, black-eyed peas and onions. These crops cover more than 95% of agricultural land in Niger, with highly diverse traditional smallholder varieties. Nearly 7000 samples of this diversity, of which 83% are millet and sorghum, are stored as



Millet farmer, village of Gongou Koira

genetic resources in cold rooms at international research centres, to be made available to plant-breeders all over the world.

**Recommendation:** That the knowledge and expertise of Niger's smallholder farmers be considered, taken into account and protected in regulations on seed.

#### **Coexistence of two seed systems**

The traditional farmer managed seed system, which has always been the dominant system, coexists with the certified seed system currently in development, which is an attempt to pave the way for a seed industry linked to the international market.

Traditional seed systems are organised horizontally by producers, who have been selecting, multiplying exchanging varieties and for generations according to rules they have set for themselves. At least 60% of farmers in Niger perform selection on their varieties and adapt them to climate change. The wide diversity of the seeds of 'traditional' varieties maintained in this way is considered by the government of Niger to be a national asset. It is the genetic resources from this asset that are used in the selection programmes for certified seed.

**The certified seed system** (sometimes referred to as the formal system), consists of seed companies' imported industrial seed and seed produced in Niger by public research centres and producers' organisations under contracts with seed breeders to produce the seed.

**Small family producers are part of both systems.** The traditional seed system, which underpins subsistence farming and food production in Niger and is based on own seed production and seed exchange between peers, is the main means of guaranteeing food sovereignty. Industrial seed unsuited to peasant farming 'The use of industrial seed [...] cannot meet the needs of peasant agroecology. Industrial seed is too expensive. Because it is selected and produced in large quantities for distribution over very large areas, it cannot be adapted to each locality. Because it is designed for industrial monoculture to be exported to global markets, it is not adapted to the diversity of local subsistence farming conditions. Even when it is distributed free of charge. it requires the use of heavy equipment and many toxic and expensive chemical inputs. [...]' (Via Campesina, International Peasant's Movement, September 2016).

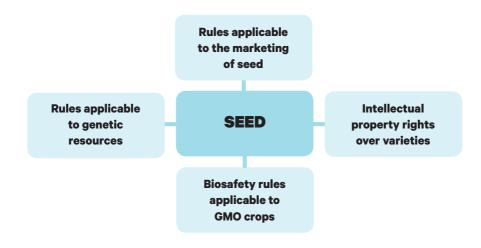
Small family producers also rely on the certified system when they access commercial seed through the market. This is notably the case for irrigated crops: fruit and vegetables and rice.

# A new regulatory framework built for industrial seed

Seed bought commercially comes from varieties selected by public research and private industry.

Seed of varieties said to be 'improved' is mainly supplied by public research institutions (mainly INRAN) and international research bodies (ICRISAT). Since the late 1990s, private seed farms have developed, which produce industrial seed. The seed is produced under growing conditions where chemical fertilizers and pesticides are used, which are very different from smallholder farmers' normal growing conditions.

In 2012, Niger drew up its first national seed policy with the aim of creating an environment that would encourage the development of a proper seed industry. This policy is in step with the 3N initiative, 'Les Nigériens Nourrissent le Niger' (Nigeriens feed Niger) and it aims to gradually replace smallholder farmers' seed with industrial seed. The development of a seed industry brings with it a series of new regulatory measures that place constraints on farmers. These regulations apply to marketing, ownership, biosafety and preservation of biodiversity.



**Recommendation:** Make sure smallholder farmers' seed systems are protected in new regional and national seed policies and the implementation of regulations.

# Influence of the international context on changes to legislation

The international seed sector underwent a rapid and profound change when biotechnology and intellectual property rights were extended to seeds and plants.

For the last 20 years, with the creation of the first patented GMO plants, the concentration of seed companies has accelerated. 63% of the global seed market and 75% of the global pesticide market are controlled by 4 multinational companies, some of which recently merged: BASF, Bayer-Monsanto, DowDupont and Syngenta (which has since merged with Chem-China). They have spent tens of billions of dollars (several times Niger's GDP) on global control of the seed market. The regulatory frameworks introduced in industrialised countries to foster trade in and intellectual property rights over industrial seed rapidly caused the disappearance of all smallholder seed in certain countries and significantly curtailed farmers' right to produce, multiply, exchange and sell their seed. These same regulatory frameworks for promoting industrial seed extend to the rest of the planet through international agreements and are spread mainly via regional economic areas, in particular with the financial and technical support of the two main industrial seed-exporting countries (France and the US).



Two regional frameworks directly affect Niger's seed laws: the Economic Community of West African States (ECOWAS) and the African Intellectual Property Organization (OAPI) (see p. 11).

These regulations are Community laws and have legal precedence over the member countries' domestic laws

Recommendation: Set up a legal watch over seed in regional areas.

### Regulations preventing the sale of smallholder farmers' seed

Under the 2008 ECOWAS regulation, all marketed seed must be of an approved variety listed in the official catalogue.

**The variety approval tests** are conducted at research stations under highly controlled agronomic conditions. The main tests assess the variety's 'purity', i.e. its:

- **Distinction**: it must be different from the varieties already listed in the catalogue;
- **Uniformity**: all plants of this variety must be uniform;
- **Stability**: all seed batches for this variety must produce plants with the same characteristics.

A number of smallholder farmers' varieties purified by research have been approved as 'improved' varieties (e.g. HKP millet, Mota Maradi sorghum, 'Violet de Galmi' onion).

**Certification** concerns the seed of an approved variety. All marketed seeds must also be certified by SOCCS (Service Officiel de Contrôle et de Certification des Semences), which awards a certificate. The seed must be multiplied in controlled fields, the germination rate is checked in a laboratory, along with the humidity rate for proper conservation, and the absence of any dirt or seeds of other species.

The distributor must also have a permit issued by the Ministry of Agriculture subject to conditions that are impossible for most farmers to meet. In addition, the cost of approval and certification is high and therefore represents an obstacle for seed breeding farmers.

The **varietal purity** requirement means that any 'impure' varieties are excluded from the official catalogue, and therefore the market, especially all the traditional smallholder varieties that cannot meet the defined purity criteria. Why? Because smallholder communities deliberately maintain the diversity of their varieties so that they adapt to the ecological smallholder farming methods practised by them, which are linked to local environmental conditions.

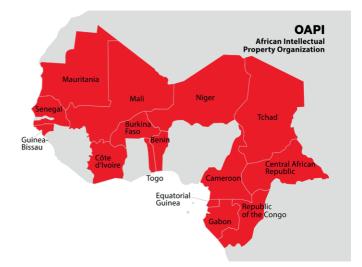
→ This regulation therefore has a negative effect on the marketing of smallholder farmers' seed varieties.

**Recommendation:** Allow the marketing of smallholder farmers' seed varieties through a participatory mechanism.

# Regulations authorising the privatisation of seed

In addition to the approval of varieties and the certification of seed, the third regulatory pillar of the industrial seed system concerns the claiming of intellectual property over a variety.

Intellectual property over a variety has been defined by the International Union for the Protection of New Varieties of Plants (UPOV), which the African Intellectual Property Organization (OAPI) has joined. An official bulletin of the OAPI contains a list of protected varieties.



A plant-breeder can claim intellectual property over a new variety and obtain a plant variety protection certificate (PVP certificate). The plant-breeder then has the right to prevent anyone making commercial use of the seed of that variety. The variety is protected by a PVP certificate for 25 years, at a cost of 8 million CFA francs. Farmers may, however, use the seed of a variety protected by a PVP certificate in their own fields, but solely for subsistence farming for their own family. They are not entitled to multiply protected varieties of fruit, ornamental or forest species.

**Recommendation:** Keep watch to prevent the appropriation of smallholder farmers' varieties through intellectual property claims by the seed industry. Protect all rights of farmers to multiply, exchange and sell their seeds and plants.

Niger was the first OAPI country to experience a serious negative impact from a PVP application by a foreign company. In 2009 the French seed company Technisem, based in Senegal, made an intellectual property claim over the Nigerien onion variety 'Violet de Galmi'. The claim was challenged by the Nigerien government, which had been alerted by civil society organisations and then by its own departments. Technisem withdrew its application for 'Violet de Galmi', converting it into a claim for the same variety, this time known as 'Violet de Damani'.

As the variety's characteristics were the same as those of 'Violet de Galmi', a further objection was raised by the Nigerien branch of the OAPI to the Ministry of Agriculture, though there was no follow-up to this objection. The 'Violet de Galmi' biopiracy case was much discussed, particularly by COPAGEN (Coalition Protection du pour la Patrimoine Génétique Africain) and RECA (Réseau National des Chambres d'Agriculture du Niger).



Woman gathering onions in her vegetable garden, Niabéré Moulaye, Dosso



'Violet de Galmi' onions

#### **Inadequate biosafety regulations**

Farmer managed seed systems can be disrupted by the introduction of industrial seed for hybrid varieties (which is not biologically reproducible by farmers) or varieties that are genetically modified (GMO) in a laboratory, patented and therefore not legally reproducible.

The GM cotton-growing trial in Burkina Faso is a dramatic example of this. Burkina Faso was the only West African country to develop cottongrowing on a large scale, until it collapsed because of the bankruptcy of thousands of smallholder farmers.



Niger has had a national biosafety framework known as the CNB since 2005. However, biosafety laws concerning GMOs are at the draft stage and the Ministry of the Environment is waiting for ECOWAS regulations to be drawn up. The absence of any biosafety laws is worrying as regards the introduction of GMOs because of genetic contamination. Burkina and Nigeria, which share the longest borders with Niger, have already granted permission to grow GM Bt cotton, and trials of GMO crops such as Bt blackeyed peas and biofortified sorghum have been reported in Burkina and Nigeria. The GMO analysis laboratory is not yet in operation for 3 main reasons:

- special training courses have not yet been organised;
- 2. the laboratory lacks reagents, which are essential for detecting GMOs;
- 3. checks at the borders are ineffective.

**Recommendation:** Closely monitor introductions of GMOs into neighbouring countries and demand an effective biosafety law to protect smallholder farmers' seed systems.

# Unenforced regulations protecting smallholder farmers' rights

It's in the diverse characteristics of traditional varieties and in smallholder farming communities' knowledge of their use that researchers find the resources and information to select new commercial varieties. They collect samples of smallholder farmers' varieties and seed from smallholder farmers' fields.

Since 2004, an International Treaty (ITPGRFA) has been in place that regulates the exchange of seed as a genetic resource. It takes into account the conservation and sustainable use of seed by smallholder farmers and promises fair and equitable benefit sharing. The Treaty demands that states take measures to protect and promote farmers' rights over their particularly through seed. their participation in decision-making at national level on issues related to the conservation and sustainable use of smallholder farmers' varieties. which therefore means all regulations concerning seed.

Niger has ratified this Treaty but regulatory authorities often still only listen to technicians or agricultural



organisations from the commercial sector. Producers representing the traditional seed system should be able to participate actively in discussions, in order to ensure the implementation of these regulations is not detrimental to their rights to manage and conserve their smallholder farmers' varieties on their farms for food and agriculture.

The smallholder farmers' rights – officially recognised until now only by the ITPGRFA – have, since December 2018, also been supported by the United Nations Declaration on the Rights of Peasants.

**Recommendation:** Involve smallholder farmers' organisations in consultations with the national focal point of the Treaty to implement farmers' rights and the protection of farmer managed seed systems.

### Issues requiring clarification in national regulations

While the ECOWAS and the OAPI regulations are directly applicable in all member countries like Niger, each country has its own national regulations. In Niger, these are governed by the 2012 Seed Policy and by the 2014 Seed Law, which try to take account of the cohabitation of both systems.

### In the **2012 Seed Policy**, the State considers that

'traditional varieties are a national asset and declares that it will work to preserve this plant material selected over decades by the people, as well as the seed that comes from it'.

Article 14 of the **2014 Seed Law** stipulates to this effect:

'Nobody may take seed from traditional varieties out of the country without prior permission from the Ministry responsible for Agriculture. Local phytogenetic resources collected or conserved by foreign research bodies shall be managed in accordance with current regulations'.

The **Seed Policy** also affirms 'farmers' right to use any variety freely for the purposes of sowing their own fields, and the right of plant-breeders to use the variety freely for research' and recognises 'farmers' right to use, exchange, share or sell the production of their farm from all

varieties without being subject to plant protection conditions'.

**BUT these rights are countered by Article 16 of the 2014 Seed Law**. This article on criminal measures may lead to the criminalisation of smallholder farmers exercising their rights to produce, exchange and sell their seed. The Article states:

'anyone who: has produced seed without a professional licence; has marketed seed without approval; has imported or exported conventional seed without making a prior declaration; has produced, introduced or marketed seed or any other plant genetic material not listed in the Official Seed Catalog [...] is punishable with a prison sentence of 3 months to 2 years and a fine of 20,000 to one million CFA francs, or one of these two penalties, except where a derogation is granted by the Ministry responsible for Agriculture.'

**Recommendation:** Strengthen lobbying by smallholder organisations so that it can influence the drafting of seed laws.

# Towards the effective participation of smallholder farming communities in drafting and implementing seed laws

The 2014 Seed Law tries to take account of the cohabitation of the two seed systems. It is therefore necessary for the participation of small family producers to be fully assured in order to make regulations favourable to their situation, whichever of the two seed systems they are in.

The CNS (National Seed Committee) consists of representatives of the research institutions, support and Advise organisations, standardisation and inspection bodies, and the private sector. It plays a consultative role and makes proposals to the Ministry responsible for Agriculture.

The absence of any peasant farmers' organisations, particularly in the largest segments (millet, sorghum, onions, black-eyed peas, rice, fruit and vegetables) raises a crucial issue in regards to representativeness.

#### Pathways to participation

→ Assert Article 9 of the ITPGRFA

to demand the participation of Peasant Organisations (POs) in the various consultations. Because traditional varieties are considered to be a genetic resource, Article 9 of the Treaty places an obligation on the states' parties to guarantee the participation of those who cultivate traditional varieties.

→ Organise a consultation forum for everyone involved in seed systems (with significant representation of small producers previously consulted by region and sector) to explain all the issues, present field trials, and discuss the segments' proposals and those of the different sectors affected by the new legal and regulatory framework for seed.

**Recommendation:** This consultation forum should be a permanent official structure. Materials providing information need to be prepared and training of farmers needs to be organised first so that they can negotiate in full knowledge of the facts, before multi-stakeholder discussions are held.

### **Civil society initiatives**

Civil society, peasant organisations and small producers are already starting to collaborate so that they can exchange experiences and start lobbying. At fairs, workshops and roadshows, small family farmers give their views on the country's strategic policies for seed. Their thoughts and proposals must be taken into account in the orientations of the regulatory framework for seed.

#### Niger's RAYA KARKARA agroecology platform

multi-stakeholder The RAYA KARKARA agroecology platform consists of members from different backgrounds: producers' federations, smallholder farmers' platforms, national and regional associations and NGOs, training centres, etc. Launched in 2015 and supported by SWISSAID from the start, the platform focuses on cooperation between the various stakeholders working in agroecology and defending it as a 'formidable



development tool that offers genuine solutions to the major challenges of our time. For the future it can guarantee the country's food safety and sovereignty, a reduction in poverty and the sustainable management of the environment, while respecting smallholder farmers' expertise and the cultural diversity of the Nigerien population' (Declaration of the RAYA KARKARA Platform).

### The platform's three main areas of intervention are:

➔ Lobbying to influence policy at local, national, subregional, regional and international level;

➔ Information, training, outreach and mobilisation on food sovereigntyrelated themes, particularly monopolization of land, water, seed, agroecology, the right to food, etc.

→ Forging alliances and building synergies for action.

The platform runs **Workshops** offering a forum for consultation between smallholder organisations and institutions. These workshops are also useful for explaining seed-related issues to civil society organisations and peasant organisations and how they are linked to realising the right to food and food sovereignty. They may be accompanied by fairs and roadshows.



**Fairs** provide an opportunity for numerous smallholder seed producers from West African countries to showcase their wares.





**Roadshows** have been held in different parts of Niger to raise awareness among rural communities of the issues related to smallholder farmers' seed.





Cabbages grown using agroecology methods, Djoga, Torodi



Dankassari, a farmer, selects millet seed from his harvest

#### SWISSAID's support for agroecology and smallholder farmers' seed initiatives

To encourage civil society initiatives, SWISSAID has supported agroecology field trials and laboratory analyses; excellent results have been achieved, scientifically proving that biopesticides and organic fertilisers that can be manufactured by smallholder farmers are effective in growing fruit and vegetables. Agroecology practices adapted to smallholder farmers have also been identified and collected in guides and technical sheets; these are distributed particularly through the Agroecology Platform.

Other projects supporting the creation and management of seed banks by farmers also exist. These banks enable smallholder farmers to store their seed, particularly during periods of drought, to generate a higher income by selling them when the price is higher, to gain independence from the large seed companies and to participate in protecting biodiversity.



This brochure is intended to be informative and educational. The opinions expressed in it are the sole responsibility of SWISSAID and merely reflect its vision of a world where agroecology can provide food safety and sovereignty.

#### **SWISSAID**

Swiss foundation for development cooperation

Lorystrasse 6a 3000 Bern 5 +41 (0)31 350 53 53 info@swissaid.ch www.swissaid.ch

