The greatest challenge for Niger is how to meet the food needs of an ever-growing population. Thus, Niger has adopted an agricultural policy, Les Nigériens Nourrissent les Nigériens (3N), which aims to increase cereal production by improving the yields of the main crops. Particular emphasis has been placed on seeds through the implementation of a National Seed Policy to make inputs available and accessible to the vast majority of Nigerien farmers. This seed policy emphasises the popularisation of improved seeds to the detriment of local seeds. This could in the long run cause irreversible damage to Niger’s agro-biodiversity.

The farmer seed system is one of the options for agro-ecological intensification to cope with the effects of climate change, the continuous decline in soil fertility and the uncertainties related to rainfall and pest pressure.

In the rural commune of Dankassari, Dosso region, farmers, in order to honour the memory of their ancestors, have embarked on the conservation of local groundnut seeds, the most appreciated of which is the Tsougouné da koudi variety, recognised for its many virtues in the community. The efforts of these farmers are supported by SwissAid in the framework of the promotion of agroecology, which is considered by small-scale producers as an efficient way to increase food availability and strengthen their resilience in the face of the resurgence of food insecurity, but also with the aim of preserving their tradition.

The rural commune of Dankassari is located in the Dosso region of Niger. Due to its position in the Sahel zone, it is suffering the full effects of desertification and the harmful effects of climate change, as well as human pressure on production...
land. Increased impoverishment, the scarcity of natural resources and the exacerbation of conflicts over water points and cultivation areas are major constraints that characterise the rural commune of Dankassari. Often, the solutions proposed by the actors in terms of agricultural production (improved seeds, chemical fertilisers, etc.) are not adapted to meet the constraints faced by producers.

The proposed solutions degrade the productive potential of agro-systems. It is in this context that SwissAid is supporting producers’ organisations in Dankassari through the Crop4Seed project, which highlights the peasant seed system as an option for agro-ecological intensification aimed at preserving and reconstituting peasant seeds.

This study provides compelling evidence that this local variety is also a heritage that has been able to adapt to the periods of drought that the area has experienced, resulting in the disappearance of other local ecotypes. This study calls on the authorities and development actors to take responsibility for preserving agro-biodiversity in Niger by focusing on the peasant seed system. It also demonstrates the clear will of producers to conserve this strategic resource for future generations.

The many virtues of local groundnut according to farmers’ experience

Groundnuts are one of Niger’s main leguminous export crops alongside cowpeas and the Dosso region in Niger is one of the production areas for this crop. The seeds of local varieties are known for their adaptation to poor soils and certain precarious climatic conditions. Tsougouné da koudi is a local groundnut variety grown in the Montéré area in the rural commune of Dankassari. This highly productive produces large pods and seeds and has a production cycle of 90 days. Producers in the area say that an average of 29 bags of 100 kg can be harvested from 3 hectares, which is roughly equivalent to one tonne per hectare. It plays an important role in food security in the area and particularly in the economy of producing households.

This seed is of crucial socio-cultural interest because it is both a source of social prestige and therefore of wealth, as well as being central to local culinary identity as it is irreplaceable in traditional sauces. Tsougouné da koudi is also known as may biyan boukatoti, which means “which satisfies the needs”.

Pest and disease tolerance

The Tsougouné da koudi variety is tolerant to crop pests such as fungal and bacterial diseases (Aspergillus niger, Macrophomina phaseolina, Sclerotium rolfsii), viral diseases such as rosette and invertebrates such as iules (thousand-legged), nematodes and bugs. One of the success factors of the Tsougouné da koudi variety is its ease of preservation. No attacks are observed during storage. Mass selection is the method used at harvest to choose good pods. This method consists of choosing and selecting during the harvest, the fruits of the crop that present good aptitudes in place to use them as seed.

1 Improved varieties are bred for industrial agricultural systems. They have reduced genetic base compared with the high variability present in the genetic materials farmed traditionally.
Resilience and adaptation in an age of climate change

The *Tsougouné da koudi* variety is a farmer’s seed unanimously recognised in the rural commune of Dankassari as being resistant to the effects of climate change. Of all the species present, it is the only one that has withstood past severe climatic conditions. It adapts to water stress by reducing the number of leaves and pods, but as soon as conditions are favourable, the plants resume their growth with vivacity. The seed of the *Tsougouné da koudi* variety is an important crop in the fight against water erosion, said Abdoulaye Guéro, head of a household of nine people.

A guarantor of food and income security

As part of the fight against the rural exodus, the elders advise the able-bodied to devote themselves to the cultivation of *Tsougouné da koudi* seed, which is one of the driving forces of the area’s economy and above all guarantees financial stability practically all year round. According to Kaka Namata, a 65-year-old head of household of 10 people, it is ‘the main source of income in the locality’. The income from marketing the products and by-products of *Tsougouné da koudi* enables the farmers to pay taxes, to seal the marriages of their sons or themselves, to buy school supplies for the children, to buy cattle and carts, and to provide health care for the members of the household. The income generated also plays an important role in household food security.

The selling prices of the products and by-products vary from one period to another. During the harvest (September-October), a 100 kg bag of *Tsougouné da koudi* pods is sold at 15,000 FCFA, whereas it is sold at 22,000 to 25,000 FCFA during the lean season (April-July). In addition, the tops and hulls are excellent animal feed. Its by-products are also sold on local markets, but mostly to the market in Niamey, the capital of Niger, where a 100 kg bag is sold for between 5,000 and 7,500 FCFA.

*Tsougouné da koudi* seeds are very rich in lipids, according to Saddi Ibro, a producer and preserver of the variety in the Dankassari area. A 100 kg bag of unhulled *Tsougouné da koudi* seed produces an average of 10 to 15 litres. A litre of oil is sold on the market at 1500 FCFA. One of the by-products of processing is groundnut cake in the form of a ball called Kouli Kouli in the local language (Hausa). One hundred (100) balls of groundnut cake are sold at 400 FCFA.

Source of respect and heritage

The *Tsougouné da koudi* variety is considered in the area as a heritage to be preserved for future generations. According to Boubacar Maiguzo, head of a household with 16 dependents, ‘the local *Tsougouné da koudi* variety has social prestige and the holders inspire respect and consideration within the community’. For several years, this community of Dankassari has known no other variety of groundnut than *Tsougouné da kouti*. It is part of their cultural heritage and must be preserved because it defines the identity of the community. Any attempt to change it is considered an attack on ancestral values, and therefore a sacrilege.
Key lesson

The conservation and promotion of the local *Tsougouné da koudi* variety remains a major concern in the Dankassari area. This study calls on the authorities to preserve agro-biodiversity in Niger with an incentive policy to promote farmers’ preferred varieties. Scientific research is also called upon to investigate the multifunctional characteristics of farmers’ varieties, as this is currently a major research gap.

CROPS4HD

This document is an output of the CROPS4HD project (www.crops4hd.org): a consortium of SWISSAID, FiBL, and AFSA supported by the SDC and LED. CROPS4HD has three major components: production, market and policy advocacy.

AFSA, which is responsible for advocacy, is a broad alliance of civil society actors involved in the fight for food sovereignty and agroecology in Africa. Its members represent small-scale farmers, pastoralists, hunters/gatherers, indigenous peoples, faith-based organisations and environmentalists from across Africa. It is a network of networks, currently with 37 members operating in 50 African countries.

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WHO IS AFSA?

AFSA brings small-scale farmers, pastoralists, fisherfolk, indigenous peoples, faith groups, consumers, youth and activists from across the continent of Africa to create a united and louder voice for food sovereignty.

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