

## B3 DROUGHT

*Government focal point:*

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### 1. General information

Switzerland provides several supports towards drought effects control in particular in the development of methodologies for observation and environmental monitoring devices, including the local environmental monitoring, environmental early warning and the implementation of monitoring-evaluation systems of the Action Programme.

Repeated droughts and soil degradation seriously endanger food security in many countries. Numerous studies are currently underway to select drought-resistant varieties. Switzerland supports research programmes which are not conducted only in laboratories and research stations, but are also based on close collaboration with rural communities. Indeed, they are the ones who test the new varieties and give the green light for further distribution of seeds.

### 2. Concrete actions taken and specific progress made in implementation

Switzerland is a founding member of the Observatory of Sahara and Sahel (OSS) and has supported the organization activities since its creation in 1992. In particular, SDC is supporting the project “**Long term Ecological Monitoring Observatories Network**” ROSELT/OSS since 1998. This support is for the implementation of the network focused on the North African countries (Algeria, Egypt, Morocco and Tunisia), which permitted **on the technical part** to develop a harmonized methodology of data collection and processing and the assessment of the evolution of the ecological and socioeconomic systems and their interactions. Some methodological guides have been elaborated and data processing tools (Local Environmental Information System and metadata base) have been finalised. All of these achievements constitute a strong basis for the implementation of the observation sites of the national devices. **On the institutional and political part**, the Environmental Monitoring concept and the implementation of National Devices are included in the NAP/CD of many countries (Algeria, Egypt, Morocco, Tunisia, Mali and Niger). In some of these countries, it is already a reality (Mali and Niger). The North African countries are initiating them (ex: Network of observatories of the Arid Zones for Sustainable Development ROZADD in Tunisia). The Swiss annual contribution to OSS is of 320'000 euros.

Through its important core contribution to the CGIAR, Switzerland provides supports to ICRISAT (International Crops Research Institute for the Semi-Arid Tropics). This center has been conducting participative phytoselection activities for over 10 years to develop drought-resistant millet varieties.

With the support of Switzerland, in West Africa, the West and Central African Millet Research Network (ROCAFREMI) promotes collaboration among 14 millet-producing African countries (Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria, Senegal, Togo) and regional and international institutions (Institut du Sahel, ICRISAT, etc.). ROCAFREMI has also focused a great deal on selection of varieties capable of producing yields under very arid conditions. The New Seed Initiative for Maize in Southern Africa (NSIMA) is supported by SDC too. It is a research project aiming to develop drought-resistant maize varieties.

### **3. Lessons learned**

The use of drought-resistant varieties increases food security. When it is integrated in a process of participatory research, it meets the true needs of rural communities.”

### **4. Major constraints and challenges**

Interventions that strengthen the preparedness of dryland populations to deal with drought are not only essential to curb or avoid land degradation, they are also key strategies to adapt to climate change, protect biodiversity, avoid food crises and reduce poverty in drylands. Mitigating the effects of drought, therefore, appears to be a strategic area in which to develop synergistic strategies and generate global benefits.