Strengthening Agricultural Water Efficiency and Productivity

Saving water and improving livelihoods by enhancing agricultural water efficiency and productivity in Africa

Water Solutions

Country/Region
Burkina Faso, Morocco, Uganda

Partner
Food and Agriculture Organisation (FAO), Agricultural Water Partnership for Africa

Background information
The agricultural sector is the largest user of water, accounting for 70% of global freshwater withdrawals. To avert a global water crisis, agriculture has to become more efficient, and produce more food with less water.

Project objectives
Agricultural water management is improved in target countries and knowledge is mainstreamed in policy and practice on the African and global level.

Beneficiaries
Smallholder farmers, extension agents, water use planners and decision-makers

Costs
CHF 3,850,000

Duration
12.2014 – 06.2019

Contact
Global Programme Water
water@eda.admin.ch

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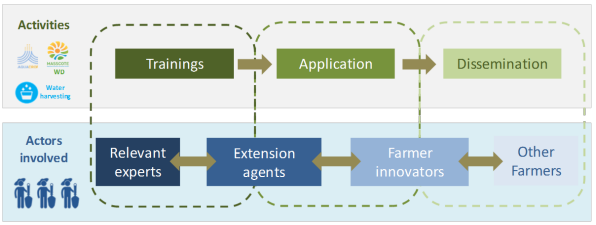
Enhancing agricultural water efficiency and productivity is imperative to mitigate water scarcity and to increase food security and small-scale farmers' incomes in the developing world. This project, implemented through the FAO and the Agricultural Water Partnership for Africa, will establish evidence-based policy, good practice and investment in sustainable agricultural water management in Burkina Faso, Morocco, Uganda and globally by linking catalytic activities to national and regional policy processes.

Agricultural water management in Africa

Africa is a rural continent where agriculture plays an important role in its social and economic development. Notwithstanding the importance of the sector, productivity levels are far from reaching their full potential. In rain-fed areas, reliance on irregular and unreliable rainfall is one of the major causes behind the low crop yields that characterise African agriculture. In irrigated areas, the lack of modern irrigation systems and the poor state of infrastructure lead to considerable water losses. This, coupled with inadequate farming management practices, has resulted in low water productivity and use efficiency in both irrigated and rainfed areas.
Improved Agriculture Water Management (AWM) can play a key role in increasing water use efficiency and productivity. For rain-fed agriculture, improved AWM practices include more efficient use of soil moisture, developing water harvesting capacity and using supplementary irrigation techniques. For irrigated agriculture, improved AWM aims at reducing water losses from drainage and non-productive evaporation.
shown in the figure below:

Mainstreaming improved agricultural water management in policy and practice

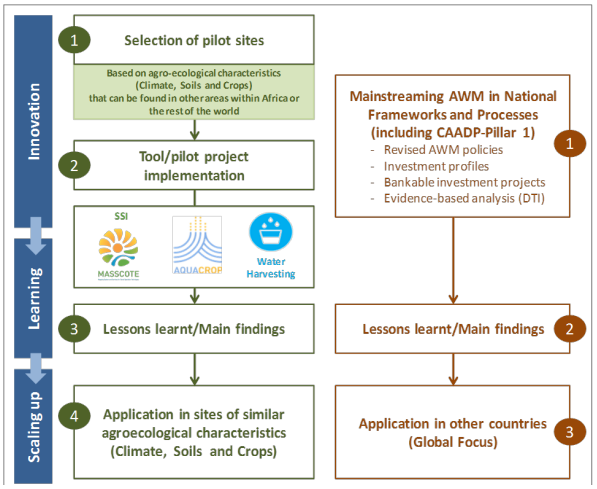
The project aims at reducing hunger and poverty in three African countries (Burkina Faso, Morocco and Uganda) by focusing on the improvement of AWM and mainstreaming AWM in national frameworks and processes. The project is in line with the objectives of the Comprehensive African Agricultural Development Programme (CAADP) of promoting agricultural growth on the African continent and in particular with its Pillar 1, which aims to extend the area under sustainable land management and reliable water control systems.
The intervention approach is to work closely with



relevant government officials, extension agents, research institutions and farmer representatives.

On the practice level, relevant experts and extension agents in related ministries as well as farmers' representatives are trained on the use of tools to enhance water productivity (AquaCrop), tools to improve the performance of small-scale irrigation systems (MASSCOTE) and methods to enhance water harvesting. The project features a case study approach to apply the tools and methods on pilot sites. Once successful improvements on crop water productivity, water irrigation efficiency and water harvesting are achieved, lessons learned and key results will be disseminated to reach a wide community of small-scale farmers.

On the policy level, national water audits are conducted. This detailed analysis of agricultural water use and other water uses gives countries a baseline to adapt water policies and improve water management plans. Findings of the case studies and the water audits will result into revised AWM policies and feed into the development of investment profiles and the formulation of bankable investment projects. This intervention and scaling-up strategy is shown in the figure below:



Additional information:
www.fao.org/nr/water/agwa