



Ghana Sustainable Land and Water Management

Programmatic Approach | Integrated Solutions | Transformational Changes



WORLD BANK GROUP

Ghana Sustainable Land and Water Management Program

A Programmatic Approach for Integrated Solutions and Transformational Changes

Located in the heart of West Africa, Ghana presents an interesting story of evolution in innovative land management interventions. Since 2009, through a **programmatic series of projects (three phases of investments)**, the country moved from a sole focus on **farmland management** to **Sustainable Land and Water Management (SLWM¹)** to **Integrated Landscape Management (ILM)** for resilience and food security.

Strategic long-term engagement is resulting in visible on-the ground impacts, improved livelihoods and multiple ecosystems benefits. Ghana's commitment to the adoption of landscape management is inspirational and is providing opportunities for future replication in the continent and beyond.

The economic, environmental and social significance of good land management in drylands and its contribution to the resilience of both ecosystems and livelihoods are gaining global recognition.



Context: Natural Resources in Ghana



Land resources are critical assets for economic growth and for a large part of the population whose livelihoods depend on them. Current agricultural practices, however, adversely affect not only farmlands but also water bodies, forests, and natural habitats leading to land degradation. According to Ghana's National Action Program, the land area prone to desertification has almost doubled in the last decades.

Furthermore, Ghana's natural habitats and biodiversity are being degraded, compromising hydrological flow regulation, and the provision of natural and environmental services. National parks and reserves are critical to faunal migration and as natural habitat corridors - linking Mole National Park to protected areas in Burkina Faso.

Approach: Programmatic Planning

In the face of these challenges, Ghana committed to adopt a programmatic approach to address land degradation. With assistance by the World Bank-supported TerrAfrica² Partnership of the African Union's NEPAD agency, Ghana developed, in 2009, its **Strategic Investment Framework (GSIF) for Sustainable Land Management** as well as its **Agriculture Sustainable Land Management Strategy and Action Plan**.

Recommendations from the GSIF and other analytical studies led to the design of the **Sustainable Land Management (SLM) Project** in 2010 under TerrAfrica's Strategic Investment Program [SIP³] with funding support from the Global Environment Facility (GEF). This **first phase investment project (US\$8.15 million)** addressed land degradation in farmlands and marked the beginning of a series of projects. As implementation progressed, it became clear that sustainability required interventions beyond just farmlands and beyond single-sector interventions.

¹ SLWM is the adoption of land use systems that, through appropriate management practices, enables land users to maximise the economic and social benefits from the land while maintaining or enhancing its ecological support functions (TerrAfrica)

² TerrAfrica is an Africa based and Africa-led partnership of 28 Sub-Saharan countries and 20 partners including Regional Economic Communities (RECs), UN bodies, international organizations, EU, bilaterals, and civil society organizations. (www.terrafrica.org)

³ The Strategic Investment Program (SIP) for Sustainable Land Management (SLM) in sub-Saharan Africa (SSA) under the TerrAfrica, is an umbrella program for scaling-up integrated and multi-stakeholder SLM approaches for greater and more sustainable impacts.

Result Highlights

- ❖ 14,109 land users adopting SLWM practices on 5,600 ha
- ❖ 5 Community Resources Management Areas (CREMAs) created within corridors
- ❖ improved management effectiveness in the Gbele Resource Reserve
- ❖ 34,213 direct beneficiaries with 55% women

By 2012, Ghana had expanded the scope of the project to target communities along the sub-watershed rivers (Kulpawn, Sisilli, and Red Volta) and biological corridors. The **Sustainable Land and Water Management (SLWM) Project** was developed, using an approach connecting Ghana's fragmented habitats – its protected areas, forest reserves, woodlands, agroforestry land, rangelands and croplands - in ten administrative districts. This **second phase investment project (US\$8.75 million)** formed part of the World Bank/GEF funded **Sahel and West Africa Program [SAWAP⁴]** in support of the **Great Green Wall for the Sahara and Sahel Initiative**, an Africa Union-led effort.

In 2016, Ghana further expanded the scope and geographic coverage of the SLWM project. A **third phase investment project (US\$ 12.76 million)** was developed with additional GEF funding. It is focusing on enhancing resilience and food security by increasing the diversity of smallholder farming systems, creating more **Community Resources Management Areas (CREMA)**, promoting equity and inclusion of vulnerable and marginal groups, and enhancing local institutions in the three regions of Northern Ghana.

Design: Innovation and Sustainability

Project design combined a package of soft and hard investments and community level interventions focusing on the maintenance of ecological and flood infrastructure across the Northern Savanna eco-agricultural zone. **Emphasis is placed on innovation, and experimentation in incentives, and extension systems to support the implementation of SLWM technologies.** Elements of sustainability are realized through support to postharvest management improvements as part of the focus on value chain and non-destructive uses of forests.

Component 1. Capacity Building for Integrated Spatial Planning

Component 2. Land and Water Management

- ❖ 2.1 Systems, Capacity, and Monitoring
- ❖ 2.2. Implementation of SLWM in Micro-Watersheds
- ❖ 2.3 National SLM and PES Monitoring
- ❖ 2.4 Management of Riparian and Other Biological Corridors

Component 3. Project Management and Coordination

Project Highlights: Integrated Solutions and Good Practices

Collaborating across Sectors for Shared Impact

National SLM Committee: : A multistakeholder platform led by the Ministry of Environment, Science, Technology and Innovation (MESTI), working with the Ministry of Food and Agriculture (MoFA); the Environmental Protection Agency (EPA); the Ministry of Lands and Natural Resources through their Wildlife and Forest Services Division of the Forestry Commission; and the Savannah Accelerated Development Authority (SADA). The project benefits from this partnership for joint planning, monitoring, knowledge sharing, verification and implementation of sub projects.

The promotion and adoption of SLWM practices is done through multisectoral collaboration across stakeholders and institutions, and within a coordination framework at the national, regional, district, and community levels.

⁴ SAWAP is the second strategic investment umbrella program (US\$ 1.1 billion) under the TerrAfrica which aims at expanding SLWM in targeted landscapes and in climate vulnerable areas in 12 West African and Sahelian countries.

Empowering Communities

Critical to the success of the project is a **decentralized implementation and coordination mechanism**. Local structures such as the Community Watershed Management Committees and the Community Resource Management Committees allow traditional authorities, women, and youth to be empowered participants in decision-making. The Konchogo Community in CREMA-Sanyiga Kasena Gavara Kara, are benefitted from alternative livelihoods activities. Women collecting shea nuts and cultivating maize are also trained in entrepreneurship, honey production and fighting bush fires.



Demonstrating Conservation Techniques



The project is contributing to honing farmers' skills, building their capacity and raising crop quality with technical assistance through extension officers. In the Kulpong Community, Wa East, farmers are trained in conservation techniques including integrated soil fertility management with cowpea, tree planting (mango, cassia, and cashew) intercropped with legumes, fire belts building, water conservation, composting and zero tillage. This has promoted farmer-to-farmer training between both beneficiaries and non-participating farmers – **showcasing a strong spill-over effect**.

Piloting Payment for Ecosystems Services (PES)

The project design has incorporated **innovative financing of farm-level SLWM technology adoption with PES**. This allows farmers to receive upfront support (extension services and critical inputs such as new seed varieties, tree seedlings, and basic equipment), followed by a series of performance-based payments based on the incremental environmental benefits generated by the SLWM technology.

PES Pilots: In 2016, 46 farmers in the Bujan Community, Sissala East District, received inputs and participated in auction with bids for each acre of surviving seedlings. This community received 210 Ghana Cedis per acre and a total of 9,660 Ghana Cedis were deposited in the bank as potential PES payment.

The Story of Bangwe Wepia, Farmer, Akaa-Achagisong Community, Kassena-Nankana West District

For several years, I failed in raising trees, due to their destruction by stray livestock and lack of technical knowledge. With SLWMP support in 2012, I received 120 grafted mango seedlings, fencing materials, and extension services to grow grafted mangoes. My mango stand gives me money to invest in my children's education. I also learned to apply organic fertilizer in the form of compost, mulch individual mango seedlings, and build firebelts around individual seedlings.

The Story of Kingsley Tindan, Farmer, Santeng Community, Talensi District of Upper East Region

Our farmlands are very bare, and nobody in this community made any effort to plant trees because we thought rocky lands couldn't support tree growing. The SLWMP sensitization programs taught us that species like cassia and eucalyptus can do well. We received fencing materials and 480 cassia seedlings with a 97% survival rate. We started honey production and are pruning the trees for fuel wood. Through this process, we learned to mobilize and work together to achieve a common course.