Ghana

Case study

Building climate-resilient communities through local investment in Ghana

Norway

Background

For farmers in Ghana, a single delayed rainy season can trigger a devastating chain reaction: ruined harvests, lost incomes, and deepening food insecurity. As climate change makes weather patterns increasingly erratic, rural communities face growing pressure to protect both their crops and their families.

This vulnerability threatens the very backbone of Ghana's economy, where agriculture employs nearly 40 percent of the workforce. Yet, instead of steady growth, millions of farmers now confront a cycle of prolonged droughts, sudden flooding, and severe post-harvest losses.

Adapting to this new reality requires urgent investment in irrigation, reliable storage, and processing infrastructure. However, local governments, despite being closest to these risks, often lack the financial and technical resources needed to act at the scale required.

Development finance solution

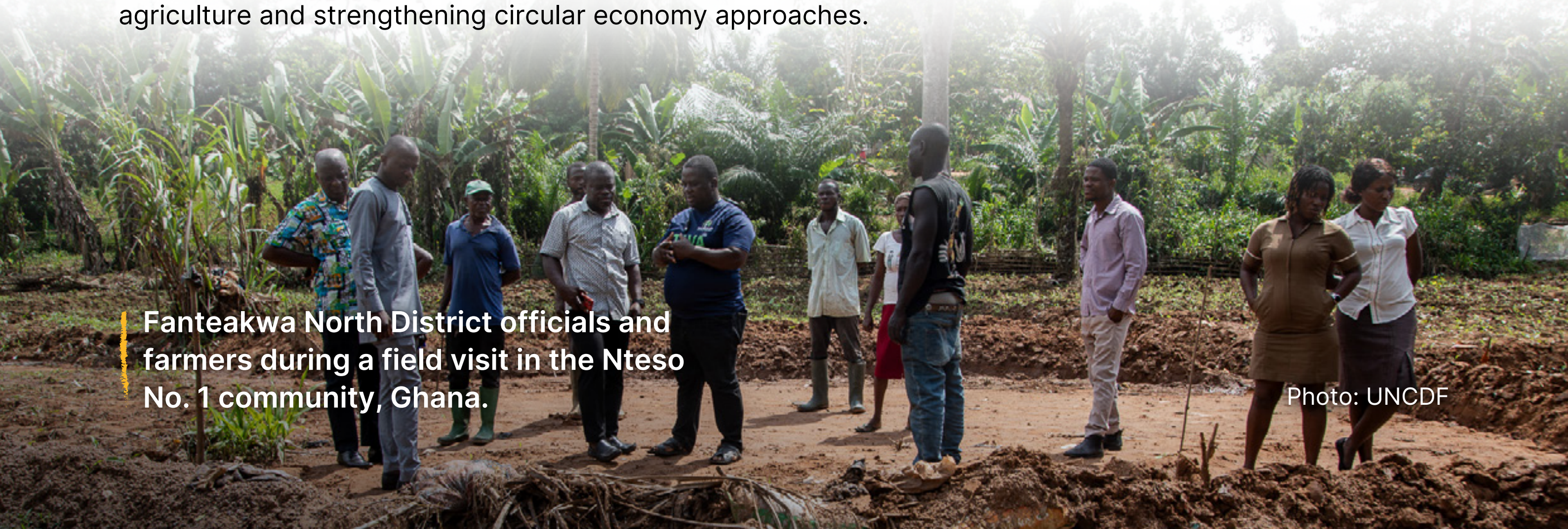
This is exactly where the United Nations Capital Development Fund (UNCDF) plays a catalytic role. Through the Local Climate Adaptive Living Facility (LoCAL), with financial support from Norway, UNCDF channels climate finance through national systems to district authorities. The approach links funding to performance while supporting locally identified climate adaptation priorities.

The mechanism deploys Performance-Based Climate Resilience Grants (PBCRGs) and technical support, allowing districts to fund locally identified climate priorities. The UNCDF-LoCAL approach uses and strengthens national fiscal transfer systems by derisking public investment in adaptation that is led by local government authorities.

By combining performance-based grants with technical assistance, the mechanism helps de-risk local climate adaptation investments. This gives local governments the resources and support needed to invest in projects that address climate risks while advancing local development priorities.

In Ghana, this targeted capital has already come to life through solar-powered irrigation, modern storage facilities, and cassava processing hubs. By embedding this model within existing government structures, districts are strengthening their ability to manage climate risks and plan for a more resilient future.

LoCAL has delivered results for communities in Ghana since 2019. In 2022, Norway began contributing to these activities to fund over 30 climate resilient investments across six districts, prioritising climate-smart agriculture and strengthening circular economy approaches.



Fanteakwa North District officials and farmers during a field visit in the Nteso No. 1 community, Ghana.

Photo: UNCDF

Cassava processing in Fanteakwa North District

In Nteso No. 1, in Ghana's Eastern Region, cassava is the main livelihood crop. However, farmers face short post-harvest windows and annual losses of up to 22 per cent, limiting incomes and reducing the value they can derive from their harvests.

To address this challenge, LoCAL supported the construction of a modern cassava processing plant and processing shed, complemented by a solar-powered borehole and a 4,000-litre overhead water tank to provide a reliable supply of water for processing activities.

The facility enables more efficient and hygienic production of cassava flour, known locally asgari, reducing losses and improving product quality. It also promotes circular economy practices by converting cassava peels into compost and reusing wastewater as a natural weedicide on farms. By strengthening local processing capacity, the investment is expected to improve market access, create employment opportunities and increase income security, particularly for women involved in the cassava value chain.

Enhanced vegetable production in Ada East

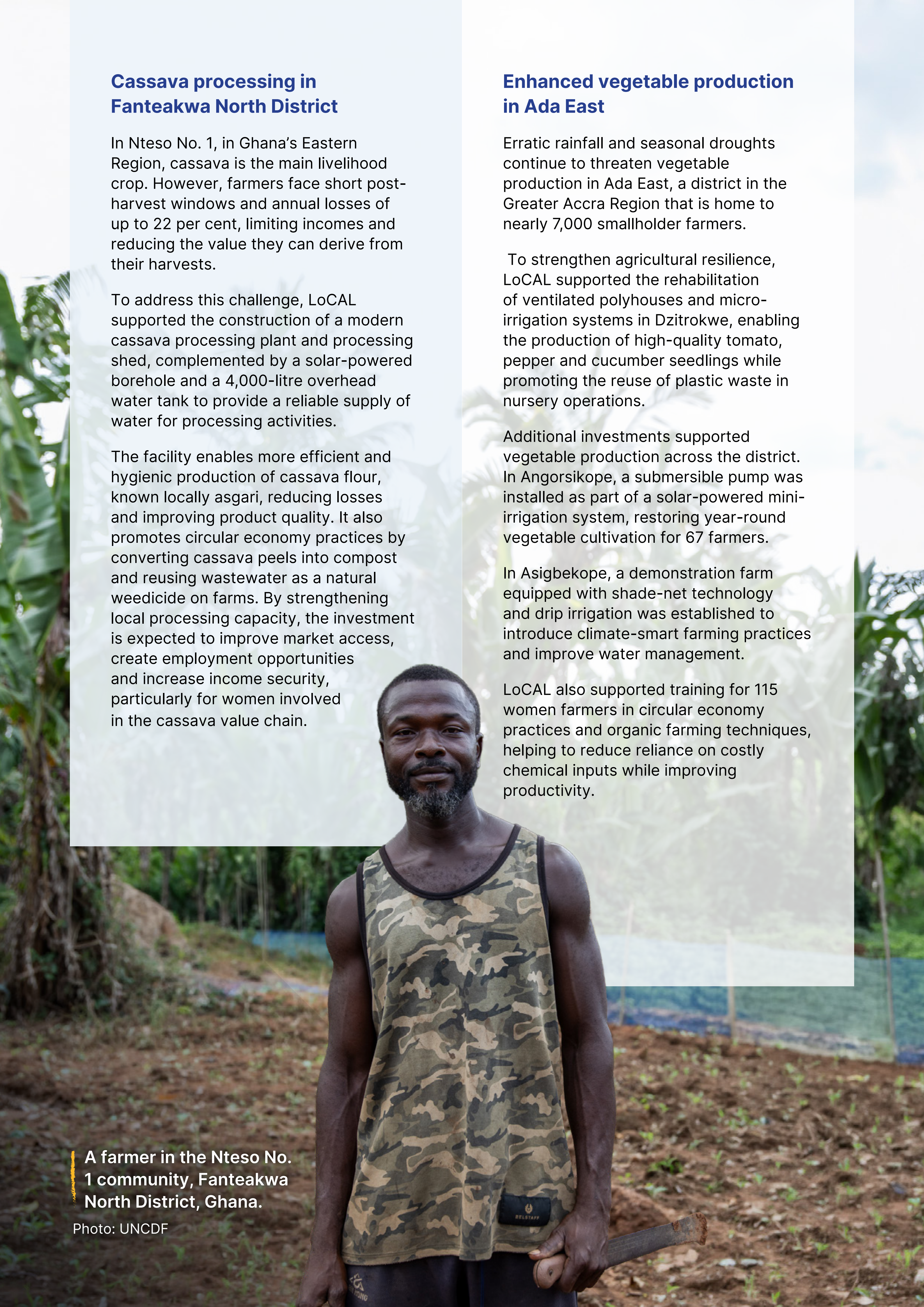
Erratic rainfall and seasonal droughts continue to threaten vegetable production in Ada East, a district in the Greater Accra Region that is home to nearly 7,000 smallholder farmers.

To strengthen agricultural resilience, LoCAL supported the rehabilitation of ventilated polyhouses and micro-irrigation systems in Dzitrokwe, enabling the production of high-quality tomato, pepper and cucumber seedlings while promoting the reuse of plastic waste in nursery operations.

Additional investments supported vegetable production across the district. In Angorsikope, a submersible pump was installed as part of a solar-powered mini-irrigation system, restoring year-round vegetable cultivation for 67 farmers.

In Asigbekope, a demonstration farm equipped with shade-net technology and drip irrigation was established to introduce climate-smart farming practices and improve water management.

LoCAL also supported training for 115 women farmers in circular economy practices and organic farming techniques, helping to reduce reliance on costly chemical inputs while improving productivity.



A farmer in the Nteso No. 1 community, Fanteakwa North District, Ghana.

Photo: UNCDF

Recycling and produce storage facilities in Effutu

In the Nsuekyi community of Effutu District in Ghana's Central Region, post-harvest losses were widespread due to a lack of storage facilities. To address this challenge, LoCAL financed the construction of a storage and recycling hub to protect maize, rice, cassava and groundnuts from spoilage, helping stabilise household incomes and improve food security.

Alongside the infrastructure investment, awareness-raising campaigns in five communities promoted climate-smart agriculture and circular economy practices Vocational training for women and youth also helped diversify income-generating activities beyond farming, including through soap-making and other small-scale enterprises.

Together, these interventions are strengthening community resilience, improve food security and reduce dependence on increasingly unpredictable rainfall.

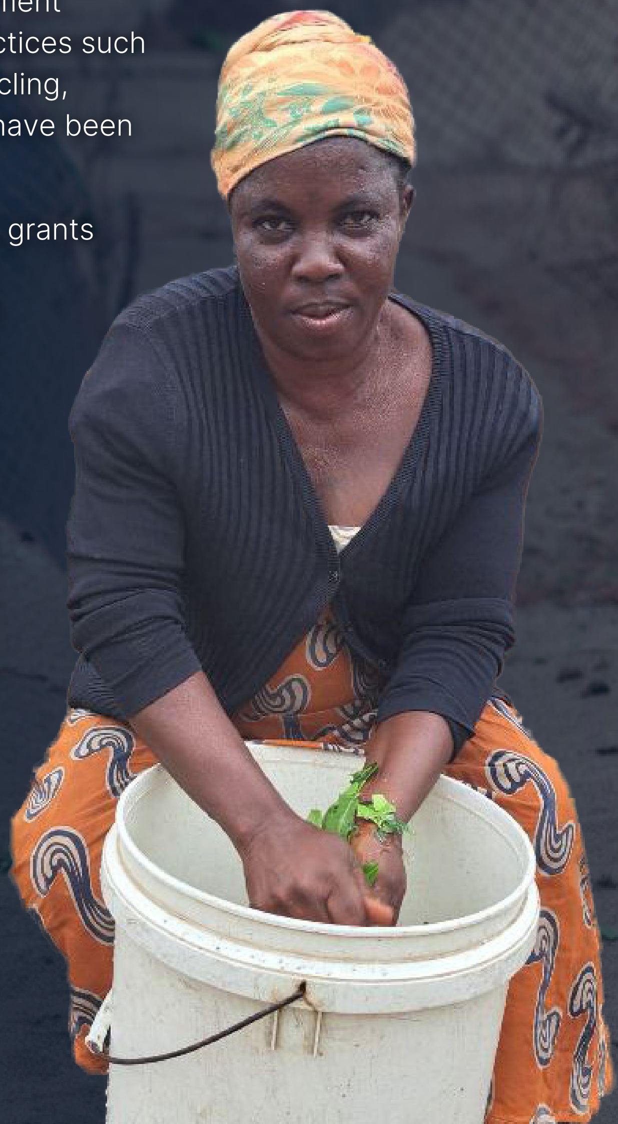
Outcome

Across the Fanteakwa North, Ada East and Effutu districts, residents say LoCAL investments have helped reduce post-harvest losses for cassava, vegetables and grains while strengthening climate-resilient infrastructure, including processing facilities, irrigation systems, water infrastructure, polyhouses and storage facilities.

UNCDF is working with women in the communities to increase their participation in agricultural value chains through processing activities, vegetable production and skills development initiatives. At the same time, circular economy practices such as composting, wastewater reuse and plastic recycling, together with alternative livelihood opportunities, have been integrated into local agricultural systems.

Beyond the direct benefits to communities, LoCAL grants and technical assistance have strengthened the capacity of local governments to plan, finance and implement climate adaptation investments.

Since 2019, funding from the Governments of Norway and Denmark, the European Union and the Embassy of the Kingdom of the Netherlands, channelled through LoCAL, has contributed to the implementation of more than 70 climate-resilient infrastructure projects across 13 districts in Ghana.



Mary Occansey demonstrates the preparation of an organic herbicide in Ada East District, Ghana.

Photo: UNCDF

At a glance

Initial Size	**$40,000** per district thus, $120,000 in total for the 3 districts
Co-funding	**$25,000** from Fanteakwa North District's own resources.
Project Types	Cassava processing, vegetable farming infrastructure, irrigation, storage, training, recycling
Investment Instruments	Performance-based climate resilience grants (PBCRGs)
Management	UNCDF and Ministry of Local Government, Chieftaincy and Religious Affairs MLGCRA with local government authorities
Strategic Partners	Ministry of Foreign Affairs, Government of Norway
Technical Support	LoCAL, district technical officers, extension services
Geographic Focus	Fanteakwa North, Ada East and Effutu districts (Eastern, Greater Accra and Central Regions), Ghana
Transaction Structure	PBCRGs transferred to subnational governments through LoCAL, which uses intergovernmental fiscal transfer system and ISO 14093, based on UNCDF and country experience

About UNCDF

UN Capital Development Fund (UNCDF) mobilizes and catalyses an increase in capital flows for impactful investments in high-risk markets, especially in Least Developed Countries, Small Island Developing States and countries in special situations. By crowding in capital through the deployment of risk-absorbing financial instruments, mechanisms and structuring advisory, UNCDF contributes to job creation, sustained economic growth and equitable prosperity in more than 70 countries.

In partnership with UN entities and development partners, UNCDF operates with speed and agility to deliver scalable, blended finance solutions to drive systemic change and pave the way for commercial finance and scale up by development finance institutions and multilateral development banks.

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