

In late 2023, Kenya experienced devastating flooding along the Tana River caused by the extreme climatic phenomenon of El Niño. Amid the disaster, GroR, operating in the region since 2022, supported their Tana River farmers with the tools and resources to persevere through the crisis. By reflecting on GroR's emergency response, we highlight the significance of the team's efforts, which offer valuable insights to enhance future responses to ensure food security and safeguard the livelihoods of farmers.

The Tana River, Kenya's longest river, is a vital source of life and livelihood for farmers living on its banks. In November and December 2023, during the extreme El Niño, the river broke its banks, and the Kenyan agricultural sector suffered staggering losses estimated at Sh. 16.26 billion ([US\\$125 million](#)). According to the United Nations Office for the Coordination of Humanitarian Affairs, floods destroyed about 1.5 million hectares of farmland in countries in the Horn of Africa during the El Niño rains from October to December 2023.

Farmlands turned into impassable swamps, forcing smallholder farmers to leave their farms and halting day-to-day work. The persistent rains led to flooding and inflicted extensive damage to farms and households, and crop damage led to significant yield losses. Farmers were unable to sun-dry and store produce that was harvested before the floods, compromising crop quality and risking massive post-harvest losses.

*"The loss of the crops is a very tangible way to measure the flood, but the loss of the work is hard to measure. We are all grieving and heartbroken because of this,"* - Micah Onyango, a farmer from Kisumu, [interviewed by FarmKenya](#).

Data collected from GroR's farmer call centre in Hola painted a grim picture, revealing that roughly 25 - 30% of farmers faced substantial losses. Over 10,000 people were displaced, their assets washed away, and productivity plummeted; farmers faced profound personal and economic hardship. The inability to bring farm-stored produce to market deprived them of vital income.

**An effective emergency response - delivering essential**

## supplies and safeguarding farmers' harvests

GroR, a pioneering Agri-Tech company, mobilised its team to provide urgent assistance to the impacted smallholder farmers in the region.

Allan Mortensen, the Managing Director of Food Security at Vestergaard, shares the story of GroR's efforts to assist smallholder farmers affected by the flooding. "GroR is committed to enhancing the lives of smallholder farmers, and we were deeply concerned about the impact of the floods on their lives and businesses. By leveraging our open communication channels, GroR connected with over 2,000 farmers in the region to determine and prioritise the most critical relief efforts needed. We learned that their farms and homes were lost, lands were waterlogged, crops submerged, and access to their fields had become an immense challenge.



GroR is committed to enhancing the lives of smallholder farmers, and we were deeply concerned about the impact of the floods on their lives and businesses.

"We swiftly mobilised resources to distribute rice from our rice mill in Hola to the most vulnerable farmers," continues Mortensen. "Their farms, food supplies and livelihoods had

been destroyed.”

“Farmers faced the challenge of storing their harvested crops safely without the risk of rot. We quickly mobilised tractors to haul their rice to the industrial dryer at our rice mill. We then provided atmosphere-controlled storage at one of our warehouses. This helped farmers save their harvests, significantly reducing potential losses and transforming them into valuable sources of income.

Mortensen further notes, “In addition, GroR has offered subsidised seeds for the upcoming planting season, and guarantees continued purchases at fair prices for future harvests. Of our 2,000 farmers in Tana River, we estimate that only 200-300 had insurance against flooding. In 2024, we purchased more than 500 tonnes of beans for export at premium prices as part of our commitment to increase their net incomes. We believe this is the right way of doing business and a sustainable way to get them back to financial prosperity.”

## **The impact of climate change**

Climate change significantly impacts farming in Africa, exacerbating challenges for a continent heavily reliant on agriculture. Rising temperatures, shifting rainfall patterns, and increased frequency of extreme weather events threaten crop yields and livestock productivity. These changes affect not only food security but also the socioeconomic stability of African nations, where a large portion of the economy depends on agriculture. Adaptation strategies are crucial, yet the limited access to resources like crop insurance, irrigation, and storage infrastructure makes resilience building a daunting task for African farmers.

As climate change exacerbates the severity of natural disasters, farmers need buffers against crises more than ever.

“Improving food security and protecting the livelihoods of smallholder farmers must remain top priorities in the face of escalating climatic uncertainty. GroR remains relentlessly focused on harnessing the transformative potential of technology and collaboration to build greater food system resilience and increase farmers’ incomes across Africa,” said Allan

Mortensen.

Last year's extreme El Niño serves as a stark reminder of the urgent need to develop resilient agricultural practices and robust support mechanisms in the face of climate change's growing pressure.

## **The GroR model helps increase the net income and decrease the economic risk of smallholder farmers**

[GroR](#), an Agritech business platform, combines state-of-the-art post-harvest loss prevention technology and a unique track-and-trace functionality. It ensures consistent large quantities of high-quality dry agricultural products and a full chain of custody. Its digital trading platform enables a transparent and traceable supply chain, a digital payment method, optimisation algorithms, and AI-enhanced data analysis, revolutionising the supply chain and improving smallholder farmers' income. Through training farmers and using state-of-the-art storage technology, GroR ensures that produce remains top quality.



[GroR](#), an Agritech business platform, combines state-of-the-art post-harvest loss prevention technology and a unique track-and-trace functionality.

It is committed to empowering smallholder farmers and strengthening resilience against climatic unpredictability. The GroR model sets out to optimise agricultural value chains, offering a lifeline to farmers in times of emergency.

In addition to meticulous aggregate planning, GroR utilises Vestergaard's innovative hermetic storage bags to ensure grain quality and avoid any losses post-harvest, protecting farmers' yields and incomes. The strong single-layer bags protect dry agricultural commodities against insect infestation, mould growth, oxidation, and rancidity.

Known for its fertile land and diverse agricultural production, the Tana Region proved the ideal environment for GroR to start collaborating with smallholder farmers in 2022. Since then, GroR has facilitated the off-take of crops (such as long grain rice and beans), ensured the production of high-quality crops for urban Kenyan markets, and capitalised on export opportunities in Asia and the EU.

## References

1. Mwangi, I. (2024) Kenya: El Nino Floods Led to 174 Deaths With Agriculture Sector Losing Sh16bn. *AllAfrica*, Jan 5. [Online] Available at: <https://allafrica.com/stories/202401060087.html>
2. Anyango, J. (2023) El Nino floods deal major blow to farmers. *FarmKenya*, Dec 5. [Online] Available at: <https://www.standardmedia.co.ke/farmkenya/article/2001486740/el-nino-floods-deal-major-blow-to-farmers>