

Editorial [Volume 26 No. 8 (2026)]

When the rains are too much: El Niño, Smallholder Farmers and Food Security in Western Kenya

For generations, farmers in Western Kenya have watched the skies carefully. The arrival, duration, and distribution of rainfall have traditionally provided important signals about when to prepare land, plant, weed, and harvest. But these signals are becoming increasingly difficult to read. Climate change is altering rainfall patterns, while increasingly frequent extreme weather events are making farming more uncertain.

The current outlook for the October–December 2026 season brings this challenge sharply into focus. The IGAD Climate Prediction and Applications Centre (ICPAC) forecasts a wetter-than-normal season across much of the Greater Horn of Africa. The Lake Victoria Basin, which includes large parts of Western Kenya, is among the areas with a high likelihood of receiving more than 400 mm of seasonal rainfall. ICPAC reports that El Niño has developed and is expected to strengthen, while a positive Indian Ocean Dipole is also expected—climate conditions that are commonly associated with enhanced rainfall in the region, and is likely to run into February of 2027.

But what does this mean for the smallholder farmer? The first point is that **more rainfall does not necessarily mean more food**. For a farmer whose livelihood depends almost entirely on rain-fed agriculture, abundant rainfall can be a blessing. It can replenish streams and water sources, improve soil moisture, restore pasture and create favourable conditions for crop production. If well distributed, the rains could contribute to improved harvests and household food supplies. The problem arises when rainfall is **too intense, too concentrated or poorly distributed**.

A farmer may receive a great deal of rain in a few days and then experience a dry spell. Another farmer a few kilometres away may receive considerably less. Heavy downpours can cause flooding, waterlogging and soil erosion. Seeds may be washed away soon after planting. Young crops can be submerged or damaged. Valuable topsoil and nutrients can be carried away, reducing the productivity of land in subsequent seasons. This is particularly important in Western Kenya, where many households depend on small parcels of land for both food and income. A failed or damaged crop is not simply an agricultural loss. It can mean less food in the household, less money for school fees and health care, and fewer resources to purchase nutritious foods.



The food-security paradox

We must, therefore, look beyond agricultural production to **food and nutrition security**. A household may produce enough maize yet still have a poor diet if vegetables, legumes, fruits, milk, eggs or other foods are unavailable or unaffordable. Climate shocks can reduce this diversity. When crops are damaged, families may depend more heavily on whatever staple food remains available.

This is why climate resilience must also be **nutrition-sensitive**. Western Kenya has a rich agricultural tradition and considerable potential for diversified food production. Farmers grow cereals, legumes, vegetables and root crops and keep livestock and poultry. Such diversity is not merely an agricultural advantage; it is a nutritional resource. It can provide different foods, spread risk and generate income at different times of the year. Climate adaptation should, therefore, not encourage farmers simply to produce more of one crop. It should help them build **diverse and resilient farming systems**.

Women carry a large part of the burden

The impact of erratic and excessive rainfall also has a gender dimension. Women in smallholder households are often deeply involved in food production, processing, preparation and household nutrition. When harvests fail, or food prices rise, women frequently have to find ways of stretching limited household resources to feed the family. When roads become impassable or markets are disrupted, women may have greater difficulty accessing food and agricultural inputs. When water sources are contaminated or damaged, household responsibilities can become even more demanding. Climate adaptation must therefore deliberately include women—not simply as beneficiaries, but as **decision-makers, innovators, farmers and leaders**.

Young people must also be part of the solution

There is another group that deserves greater attention: young people. Western Kenya cannot build climate-resilient agriculture while treating agriculture as an occupation of the past. Young people need to see opportunities in modern farming, agro-processing, food safety, climate information services, irrigation, digital agriculture and agricultural entrepreneurship.

The increasing unpredictability of climate may actually provide an opportunity to make agriculture more innovative. Young people can help introduce new technologies, improve access to climate information, develop value-added products and create businesses around food production and processing.



From forecasting to action

The availability of a climate forecast is useful only if it reaches the people who need it in time. Farmers need information that answers practical questions: **When should I plant? Which crops or varieties are appropriate? How can I protect my soil? What should I do if rainfall becomes excessive? How can I protect harvested food? Where can I obtain reliable seed and other inputs?** Seasonal forecasts should, therefore, be translated into **local, practical agricultural advice**. ICPAC itself emphasizes that seasonal forecasts should be used together with weekly and monthly forecasts and national meteorological information.

This requires stronger links between meteorological services, agricultural extension officers, researchers, county governments, farmer organizations and communities. We should also strengthen simple but important measures: water harvesting, drainage, terracing and soil conservation; planting crops and varieties suited to local conditions; maintaining vegetation cover; diversifying crops and livestock; improving storage facilities; and protecting food from moisture and contamination.

Prepare before the rain comes

The greatest lesson from the current El Niño outlook is perhaps that **preparedness must begin before the first heavy rains arrive**. Governments and development partners should not wait for floods, damaged roads, destroyed crops or food shortages before responding. Early warning should lead to early action. Farmers should be supported to prepare their farms, protect livestock, secure seed and inputs, strengthen food storage and identify alternative routes to markets.

This is particularly important because the same season can produce both opportunities and losses. ICPAC notes that enhanced rainfall can support agricultural production and replenish water resources, but can simultaneously increase the risk of flooding, flash floods and landslides in vulnerable areas.

A changing climate requires a different agricultural mindset

Perhaps the most important change we need is in the way we think about farming. For too long, agricultural planning has often assumed that rainfall will behave according to a familiar calendar. That assumption is becoming increasingly unsafe. Farmers now have to manage not only **too little rain, but also too much rain, rain at the wrong time and rain in the wrong place**.

The challenge is, therefore, not simply to produce more food. It is to build food systems that can continue providing **adequate, diverse, safe and nutritious food**



under increasingly uncertain climatic conditions. Western Kenya's smallholder farmers should not be left alone to carry this burden. They need science that responds to their realities, extension services that reach them, climate information they can understand and use, financial services that help them manage risk, markets that function during difficult seasons, and policies that recognize the central role of smallholder agriculture in national food and nutrition security, and partners who are willing to appreciate and make use of indigenous knowledge. El Niño should, therefore, be viewed neither simply as a disaster nor automatically as a blessing. **It is a climate event whose consequences will depend greatly on our preparedness.**

The question before us is not merely, “**Will the rains come?**” They probably will. The more important question is: **Will our farmers, food systems and institutions be ready when they do?** That is where climate resilience—and ultimately food and nutrition security—will be tested.

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