

Appendix 1. CCAFS East Africa scenarios

The CCAFS East Africa scenarios were developed during four workshops organized in 2010 and 2011 - 120 stakeholders from Kenya, Tanzania, Ethiopia, Uganda, Rwanda and Burundi, as well as regional and global actors came together to develop exploratory scenarios with the aim to guide decision-making processes in the region related to food security, environments and livelihoods. These included farmers' organizations, policy advisors, regional governance bodies such as the East African Community, research organizations, regional NGOs, private sector organizations, regional media and civil society organizations (Vervoort et al. 2013).

The scenarios were developed for the period 2010-2030. Two drivers were considered highly relevant for future food security, environments and livelihoods in Eastern Africa, but with high levels of uncertainty attached to them:

- *Regional integration:* Will the countries of Eastern Africa integrate politically and economically, or will a fragmented status quo be maintained?
- *Mode of governance:* Will governance – the rules, regulations, institutions and processes affecting the behaviour of individuals and groups – be characterized by a reactive or proactive stance of governments, the private sector and civil society?

These two drivers were used to structure four scenarios. These are displayed in figure 1, with cartoon representations by artist Mauvine Were. Here, we provide the summarized scenario narratives, which were named after animals inhabiting the East-African savannahs.

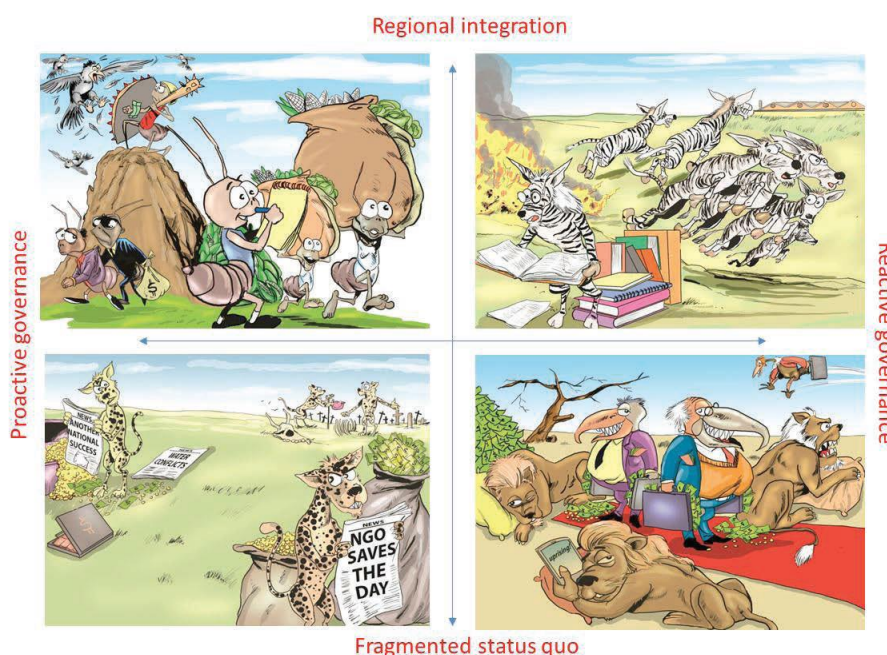


Figure 1. Cartoon representations of the CCAFS East Africa scenarios (from Vervoort et al. 2013)

Scenario 1: Industrious Ants

This scenario is characterized by the slow but strong economic and political development of East Africa and proactive government actions to improve regional food security; however, there are costly battles with corruption and security is fragile as the region has to deal with new international tensions resulting from its assertion in the global political and economic arena. The region's focus away from export-only commercial crops causes some challenges to compete on the global market – and the region's dedication on regional self-reliance proves to be challenging when a great drought hits in the early 2020s – though by that time many state and non-state support structures are in place to help mitigate the worst impacts. Governments and non-state actors struggle to mitigate the environmental impacts of growing food and energy production.

Scenario 2: Herd of Zebra

In this scenario, governments and non-state actors are dedicated to a push for development - but mainly through industry, services, tourism and agriculture for export. In terms of food security, environments and livelihoods there is limited action. Natural lands decline. East African economies are booming but the region suffers the consequences of a double vulnerability - to global markets and environmental change. Only when food insecurity becomes extreme after food import prices skyrocket at the time of a great drought in the early 2020s are actions taken to govern water resources and invest in climate-smart food production for regional consumption.

Scenario 3: Lone Leopards

In this scenario, regional integration exists only on paper. In reality, governments and non-state actors are securing their own interests. In terms of food security, environments and livelihoods, the region initially seems to be heading toward catastrophe. However, after some years many regional state/non-state partnerships become very pro-active and, unburdened by tight regional regulations and supported by international relations, are able to achieve some great successes. Unfortunately, this is a hit-and-miss world because of the lack of coordinated efforts and key problems are ignored. Governments' inability to overcome regional disputes and collaborate becomes untenable when a major drought hits in 2020. This phenomenon pushes civil society, bolstered by international support, to demand radical change in governments. The change sticks in many cases, and for the better.

Scenario 4: Sleeping Lions

This scenario is all about wasted potential and win-lose games. Governments are reactive and self-interested – allowing foreign interests free reign in the region. This has devastating consequences for food security, livelihoods and environments in the region. Conflicts, protests and uprisings are common,

and every time there is the promise of reform, it rarely materializes into any real change. Only at the very end of the period do the first signs of better governance emerge – but the future is still very uncertain. With no coordinated efforts to deal with climate impacts, a great drought in the early 2020s causes massive losses among the region's poor – and only communities' adaptive capacity and resilience, born out of decades of forced self-reliance, informal economies and the ability to share key knowledge can help mitigate some of the worst effects of this disaster.