Aquaculture is the fastest growing food sector in the world, accounting for more than half of the fish and seafood products consumed globally in 2021. Beyond improving food security, the sector holds significant potential to boost employment and rural development. However, aquaculture remains in its infancy across most of Africa. Production is highly concentrated in a few countries—notably Egypt, which ranks among the world’s largest producers. Increasing demand for fish products promises high potential for growth. However, purposeful policy shifts are needed to transform subsistence operations into commercial enterprises. This policy brief draws on insights from Egypt, Nigeria and Kenya to identify success factors that could contribute to scaling the sector across the continent.

**Egypt’s relationship with aquaculture stretches back millennia.** Domestic demand for fisheries products, in particular tilapia, is strong. A deep dive into Egypt’s aquaculture reveals useful lessons for other African countries looking for strategies to boost domestic production. While Egypt has been successful in establishing facilities in harsh and dry environments, challenges related to sustainability of production remain, such as water use and pollution.

**Nigeria** is Africa’s second largest producer of aquaculture products, cultivating mainly African catfish in line with local preferences. Nigeria provides an interesting example of a country with extremely high demand that is unable to be satisfied by its domestic fisheries industry and imports combined.

**Kenya** is the continent’s eighth largest producer, mainly of tilapia followed by African catfish. While production volumes are still low, Kenya has achieved strong relative growth over the past decade, driven in large part by cage fisheries. Nevertheless, Kenyan producers have struggled to keep up with demand.

**Lessons from the country studies**

**Production trends**
In all three countries, demand for fish and seafood products outstrips supply and shortfalls are being met by imports. This reality presents an opportunity to boost production levels and improve linkages to consumers.

**Policies and governance frameworks**
Egypt demonstrates how sector-specific national frameworks and strategies that are aligned with international and regional policies create a robust foundation for sustainable aquaculture growth. These must be supported by government institutions to ensure intentions are equipped to be actioned.

**Natural resources**
All three countries are well endowed with natural resources (including marine and freshwater resources) that can support a productive aquaculture sector, but the full potential remains underutilized. Marine aquaculture is underdeveloped in all three countries despite long shorelines. Government support will be required to strategically develop the underused areas.

**Technologies and innovation**
While all three countries have been making progress in the adoption of innovative solutions in the aquaculture sector, the potentials of technological progress both at the production level and along the value chain remain underutilized.
Private sector role
Government support to foster private sector participation in the aquaculture sector is crucial to overall success. The example of Egypt, where national strategies are explicitly geared towards supporting the private sector, shows the potential benefits of promoting strong public-private partnerships (PPPs).

POLICY RECOMMENDATION
Provide an enabling environment for private sector engagement in the aquaculture sector. Examples include support for PPPs, access to finance, infrastructure, quality control, and capacity building.

Feed and seed
Local production of feed and seed is generally insufficient. In particular, shortfalls of feed need to be met with expensive imports. The quality of inputs is also a concern for fish farmers, as is access to ingredients for feed manufacturers and hatcheries.

POLICY RECOMMENDATION
- Invest in decentralized feed and seed production to ensure easy access, lower input prices and income generation in rural areas, supported by quality control and capacity building initiatives.
- Promote breeding programmes for locally farmed fish species and foster related knowledge exchanges between countries.

Markets
The aquaculture sector is primarily focused on domestic markets and heavily concentrated on species of local preference. Quality requirements in higher-income markets prevent producers from taking advantage of market opportunities. Supply gaps are generally closed by imports from non-African countries which undermines the development of the local industry.

POLICY RECOMMENDATION
Foster national, sub-regional, and continental market integration to benefit from market opportunities, including facilitation of fisheries trade through the African Continental Free Trade Area (AfCFTA).

Food security and employment
While fish and seafood play an important role in the case study countries’ national diets, per capita consumption rates in Kenya and Nigeria are still low compared to regional and global averages. Fish can be an important source of affordable animal-sourced protein, in particular among lower income groups. Fish health management is essential to ensure the production of safe aquaculture products. The sector also has high potential to boost employment at the production level and along the value chain.

POLICY RECOMMENDATION
- Promote sustainably farmed fish and seafood as a high-quality, affordable and locally produced source of protein.
- Collect disaggregated data on employment in the aquaculture value chain, including spill-over effects on other sectors, to better understand employment potentials and guide investments into skill development, especially among women and youth.

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