

Key message

Aquaculture has a high potential to provide for food and nutrition security in the East African Community

To realise this potential, issues with feed, fingerlings and knowledge need to be solved

A regional approach is needed
with more public-private cooperation

The Food Tech Africa consortium is dealing with these challenges through PPPs and integrated value chains

Opportunities and bottlenecks in the governance of aquaculture value chains in the East African Community

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1. Research objective and methods

Research objective:

- To identify the opportunities and bottlenecks in the governance of aquaculture value chains in the East African Community
- Special reference to Kenya, Uganda, Tanzania

Methods:

- Desk studies
- Field work
- Semi-structured interviews with relevant actors

2. The East African Community

- Established in 1967
- App. 150 million people
- GDP USD 110 billion (2014)
- Growing middle class
- Increasing private investments over the last 5 years



3. Needs in the EAC

- Food & nutrition security
- Economic development & employment
- High quality & healthy animal proteins
- Sustainable use of environments
- Impact reduction of deforestation & erosion
- Water quantity and quality



4. Past experiences

- Fish farming introduced in Kenya in 1900 by colonialists
- Static pond culture in 1920s (Tilapia, Carp, Catfish)
- Eat more fish campaign in 1960s
- 1960-2000 new initiatives for extensive Tilapia farming
- International and local efforts didn't result in breakthrough
- Poverty Reduction Strategy in 2000; aquaculture key dev
- Economic Stimulus Programme & subsidies
- Many new Tilapia farms from 2007

5. Aquaculture in the EAC

- Small scale ponds, intensive cages & RAS
- Current production app. 36,200 MT
- Required in 2018: 82,000 MT
- Main species:
 - Tilapia (*Oreochromis niloticus*)
 - African catfish (*Clarias gariepinus*)
- Current feed production: 5,100 MT
- Required in 2018: 124,000 MT



6. The potential of Tilapia

- Most promising species for farming
- High consumers' demand
- Attractive price for producers and traders
- Easiness to farm
- Less dependency on fishmeal in its diet
- Availability of local feed ingredients
- Support by national governments





Photo: B.C. Bolman

7. Availability of feed ingredients

Ingredient	Kenya	Uganda	Tanzania
Cattle blood/bone meal			
Fish meal / waste		✓	
Poultry meal			
Silver cyprinid meal	✓	✓	✓
Cassava	✓	✓	✓
Cotton seed		✓	✓
Groundnut		✓	✓
Maize bran	✓	✓	✓
Palm oil			✓
Rice bran	✓	✓	✓
Soya bean / oil		✓	
Sunflower seed		✓	✓
Wheat bran / middling	✓		

8. Results: opportunities

- High demand for fish proteins
- Compensate for declining fish stock in Lake Victoria
- Contribute significantly to food & nutrition security
- New investments due to political & economic integration
- Local fish feed manufacturing
- Establishment of hatcheries
- Value addition to products

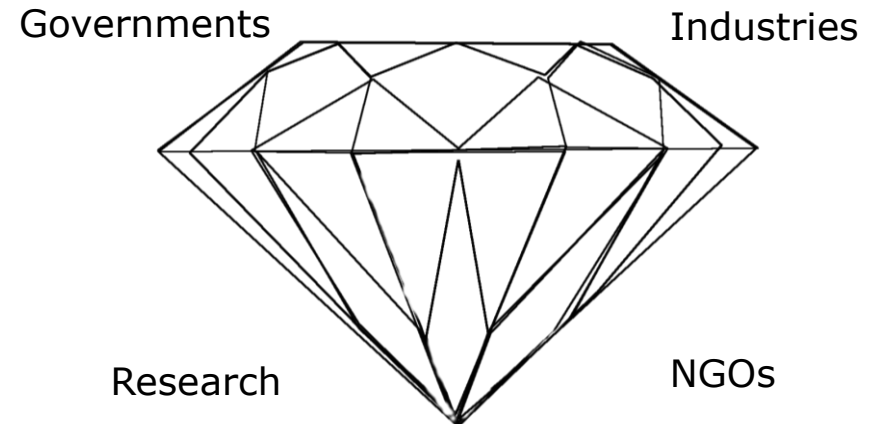


8. Results: bottlenecks

- Reliable volumes & prices of high quality feed
- Reliable volumes & prices of high quality fingerlings
- Knowledge & skills at the farm level
- Access to financing
- Linkages between smallholders and markets
- Accessibility of farmed fish for the poor?
- Higher demand for ingredients & competing claims?

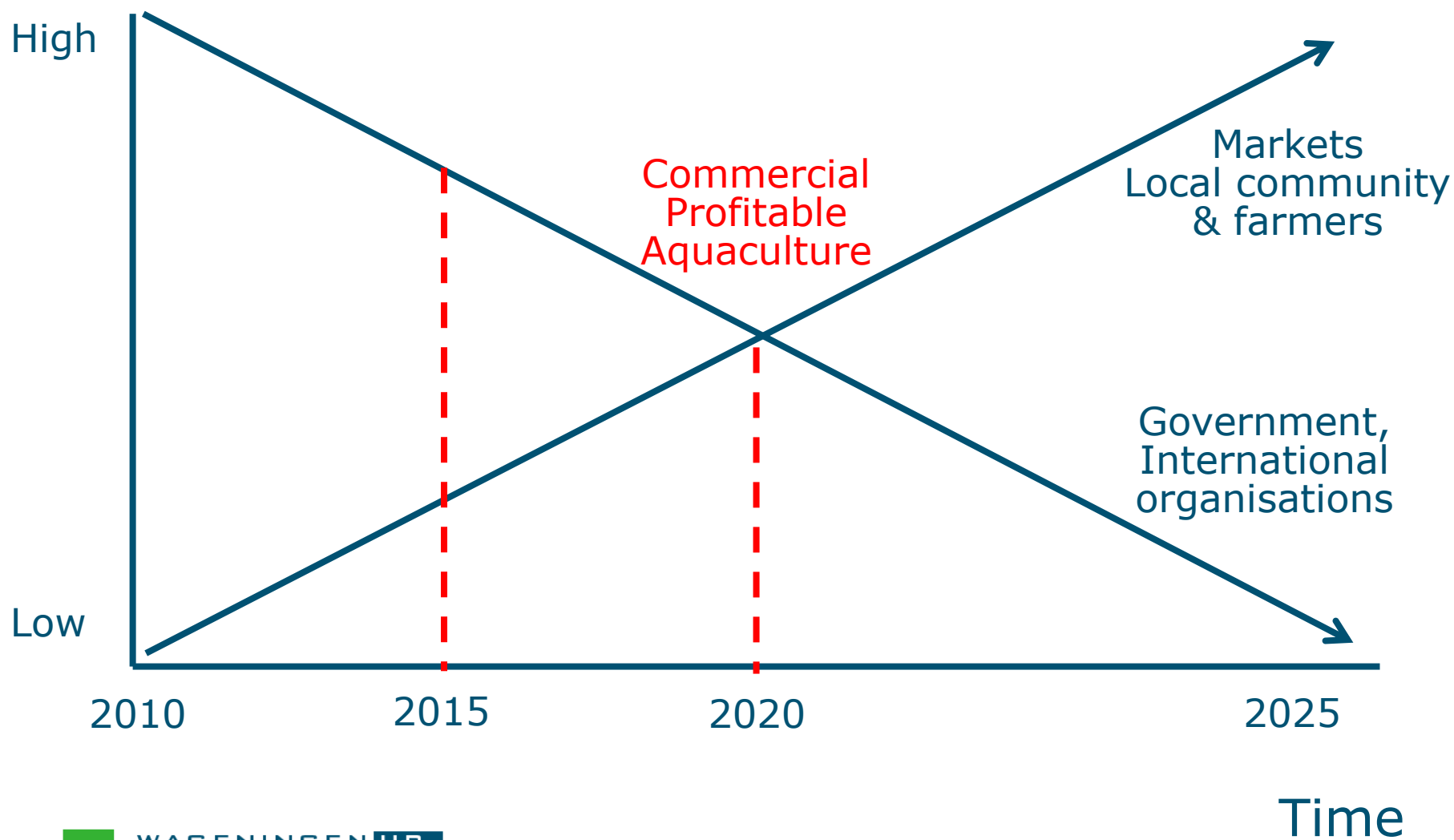
8. Results: Governance & stakeholders

- Tailor made transfer of existing technology
- Capacity building
- Monitoring of inputs and outputs at the farm level
- Public-private partnerships EAC & other countries
- Regional approach
- More coordination





Involvement



9. Food Tech Africa – A regional approach

- Agro-food companies, research & government
- Improve nutrition security through integrated value chain
- Series of reports and studies
- Linkages in value chains in EAC
- Feed mills, hatcheries, farms based on business cases
- Follow up: identify availability of raw materials for feed
- Partly financed by Ministry of Foreign Affairs
- More info: www.foodtechafrica.com

FoodTechAfrica



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