

Food system transitions in Nairobi slums - Stakeholder representation in Food Futures

Webinars -
5 and 11 November 2020



1. INTRODUCTION

Increasingly, people are migrating into cities, and large-scale cities are developing. This is also the case in Nairobi, where Kibera – sometimes referred to as the largest city in Africa – is located, among other slums. The large share of people concentrated in the city demands affordable, accessible and nutritious food, including fish and vegetables. In the two Webinars on ‘**Food system transitions in Nairobi slums - Stakeholder representation in Food Futures**’ held in November 2020, FAOKE and WUR focused on issues and knowledge questions that are relevant to stakeholders in rural-urban food systems. **What interventions take place, and how are stakeholders represented through transitioning the urban food systems?**

Through a structural change in the rural-urban food systems in Kenya, affordable and accessible food nutrition and food security can be enhanced. On 8 August 2020, a truck with farmed fish was brought from Nyeri to Kibera for the first time and every week after, supported by a project called ‘Feeding Cities and Migration Settlements’.* FAOKE also has a track record in carrying out projects on ways to ensure viable and sustainable food systems and poverty alleviation in cities, including the two projects called: ‘Integrated Actions for Innovative Food Systems across Rural-Urban Communities’ and ‘Agrinvest Food Systems’.** Food system analyses have showed that with only a few interventions great improvements in food system outcomes can be reached (van Berkum et al., 2020).

2. LESSONS LEARNT

Lessons learnt from presenters

- While many of the UN’s Sustainable Development Goals (SDGs) are relevant to the presenters of these Webinars, the most important ones include the aims for zero hunger (SDG2) and sustainable cities and communities (SDG11).
- Many people and organisations applying a food system approach to aquaculture value chains – and sharing the urgencies of this approach.
- It is recognized that cities are growing rapidly and that future consumers in the cities will demand larger amounts of affordable and accessible nutritious.

WEBINAR 1: FOOD FUTURE -TRANSITIONING ACTIVITIES IN NAIROBI’S SLUMS: Objective: To present relevant food system activities targeting slums of Nairobi focusing on fish and vegetables, and addressing core livelihood challenges. ([LINK TO: WEBINAR 1](#))

Speakers:

- **Welcome:** *Ivo Demmers* (WUR)
- **Introduction:** Facts and figures of the Nairobi food systems and livelihood: *Benson Obwanga* (Egerton/ Laikipia Universities)
- **Presentation 1:** Food systems planning to address food and nutrition security challenges in Nairobi: *Rebeccah Wanjiru* (FAOKE)
- **Presentation 2:** A new Nyeri-Kibera rural-urban fish food system: *Gabriel Francis Mwangi* (FOSPA)
- **Reflection 1:** *Simkje Kruidierink* and *Inge Tenniglo* (LNV)
- **Reflection 2:** *Jane Kibwage* (Fish Market Authority, Kenya)
- **Concluding remarks:** *Katrine Soma* (WUR)

WEBINAR 2: STAKEHOLDER REPRESENTATION IN NAIROBI FOOD TRANSITIONS: Objective: To discuss stakeholder representation and uptake of actual needs in ongoing projects aiming at sustainable food system transitions, focusing on the fish and vegetable value-chains. ([LINK TO: WEBINAR 2](#))

Speakers:

- **Welcome:** *Ivo Demmers* (WUR)
- **Introduction:** Who represents the needs of people, nature and the world? *Susanne Njeri Kuria* (CASK)
- **Presentation 1:** The importance of stakeholder representation through urban food systems and private sector investments: *David Makongo* (FAOKE)
- **Presentation 2:** Stakeholder representation in the Nyeri-Kibera fish food system: *Charles Mbauni* (FOSPA)
- **Reflection 1:** *Ruth Mwarabu* (ABDP)
- **Reflection 2:** *Sidi Mngmboa* (ABDP)
- **Concluding remarks:** *Katrine Soma* (WUR)

- In these Webinars we have matched insights of UN financed projects (FAO, IFAD), governmental insights, sector representation, research institutes presentations and community leaders’ insights.
- Matching insights across levels, communication across groups and people, and putting target stakeholders up first in project developments, are seen critical aspects that can bring us forward in future food transitions.
- Sustainability, inclusiveness, innovations and circularity within and across food systems are building blocks to strive for in future food transitions.

3. WELCOME

Food security and valuing water

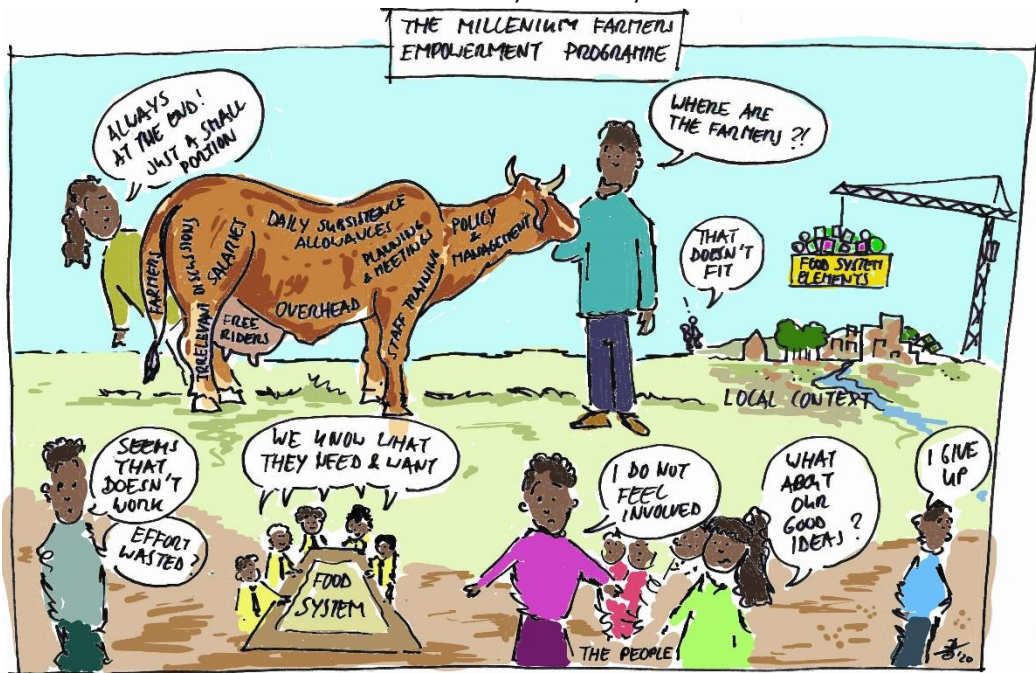
- Aims at more inclusive, resilient and sustainable food systems.
- Contributes to food security by combining our interdisciplinary knowledge in the agri-food and water domains to shape the transitions towards sustainable food systems.
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- Addresses across eight projects the urgencies of:
 - Urban growth
 - Undernourishment
 - Climate change
 - Water shortage
 - The needs for transitioning of our food systems
- A big risk in previous projects and programmes is that too much effort is focused on issues that do not directly reach key beneficiaries.

Ir. Ivo Demmers (WUR)

Opening of the webinars

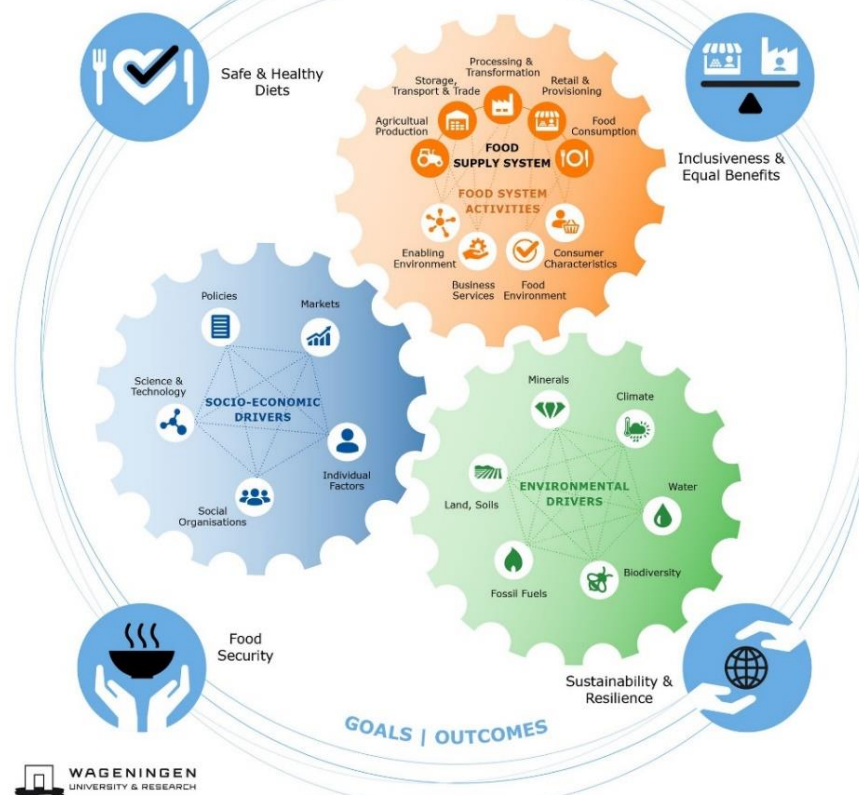


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Food systems framework

Van Berkm et al. 2018, Wageningen University & Research



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4. INTRODUCTIONS

Facts and figures of the Nairobi food systems and livelihood (Nairobi, Kenya):

Brief History of Kibera

- The name originates from the Sudanese Arabic word 'kibra', meaning bushy place/forest
- Initial residents were WW1 Nubian veterans of Sudanese origin
- The Nubi people were settled by the British colonial government between 1912 and 1934
- The original size of Kibera land was about 900 acres

Demographics of Kibera

- Exact population depends on source (Government of Kenya, NGOs, Multi-lateral programmes)
- Figures between 170,000 to 1.5 million are reported
- Most residents are of Kenyan descent and there are a few foreigners
- Some villages are dominated by one ethno-linguistic and social background



MSc Benson Obwanga (Egerton/ Laikipia University)

Facts and figures of the Nairobi food systems and livelihood



Who represents the needs of people, nature and the world? The aquaculture sector in Kenya:

What are the needs of people, nature and the world?

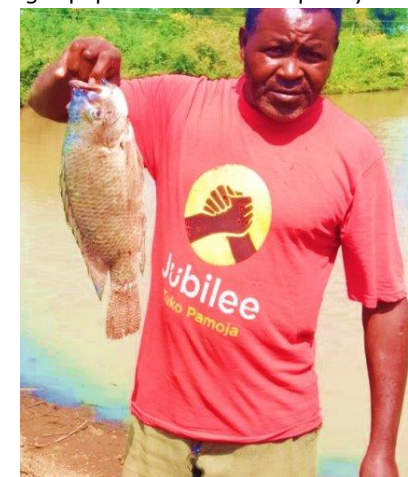
- The most important needs of the people:
 - Food safety (quality) – Is the fish safe from pesticide residue and heavy metals?
 - Affordable and available produce – Is food affordable to the targeted consumer and is there a consistent supply?
- Nature - Environmental conservation:
 - Disposal of packaging waste – are there opportunities for recycling?
 - Disposal of water used to process/culture the fish – Does it contaminate water sources?

Ways forward for the aquaculture sector

- Strengthen existing organisations within the aquaculture sector, from the grassroots, county level to national level.
- Strengthen/facilitate linkages of producer groups with markets.
- Work on county/region strength in terms of size of fish to grow.
- Ensure innovation and technology have a role to play.
- Emphasise value addition.
- Ensure that the physical markets have supporting infrastructure e.g. ice boxes and transportation trucks fitted with cooling equipment to assure quality.
- Work on stronger linkages between producer groups and the policy reform process to ensure an improved business environment for the growth of the trade.
- Ensure a greater link between research and farmer for adaptation.
- Encourage the adoption of the 'Adapted Value Chains' in the fisheries sector to ensure both upstream and downstream activities are observing environmental conservation measures. This will build resilience for the value chain in its entirety.

Susan Njeri Kuria (CASK)

Who represents the needs of people, nature and the world?



5. WEBINAR 1: FOOD FUTURE TRANSITIONING

– MAIN PRESENTATIONS

Food systems planning to address food and nutrition security challenges in Nairobi:

Nairobi: Lessons learnt

- Bring all relevant stakeholders to the table (govt. private sector, farmers, youth, business community, development partners).
- Recognise that building strong and inclusive stakeholder platforms may take time.
- Strengthen local capacity of government officials, local institutions on food system analysis and planning.
- Create linkages between the governance mechanism (multistakeholder engagement) and the assessment from inception to final stage and to policy making process.
- Recognise that the food system planning process (policy making) takes time/cities should be at the forefront of driving the process.
- Strengthen peer-to-peer learning at country level, sub-regional and regional level.
- Strengthen partnerships with institutions and communities for a better and comprehensive policy making process that addresses the needs of even the most vulnerable.

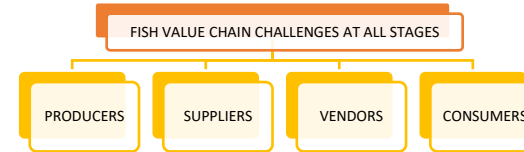
MSc Rebecca Wanjiru (FAOKE)

Food systems planning to address food and nutrition security challenges in Nairobi



A new Nyeri-Kibera rural-urban fish food system: Core food system challenges in Kibera

- Economic melt-down & low spending power (poverty)



Other food systems challenges in Kibera

- Irregular electricity
- Irregular water supply
- Water and environment pollution
- Lack of cold storage facilities
- Insecurity
- Lack of information

Main incentives to come and live in Kibera

- Low cost of houses
- Cost of living is very low
- Proximity to:
 - Employment: the Central Business District/ Industrial area/ High-end suburbs
 - Consumption: Shopping malls
 - Health: Kenyatta National Hospital
 - Education: Various institutions of higher learning

Gabriel Francis Mwangi (FOSPA)

A new Nyeri-Kibera rural-urban fish food system

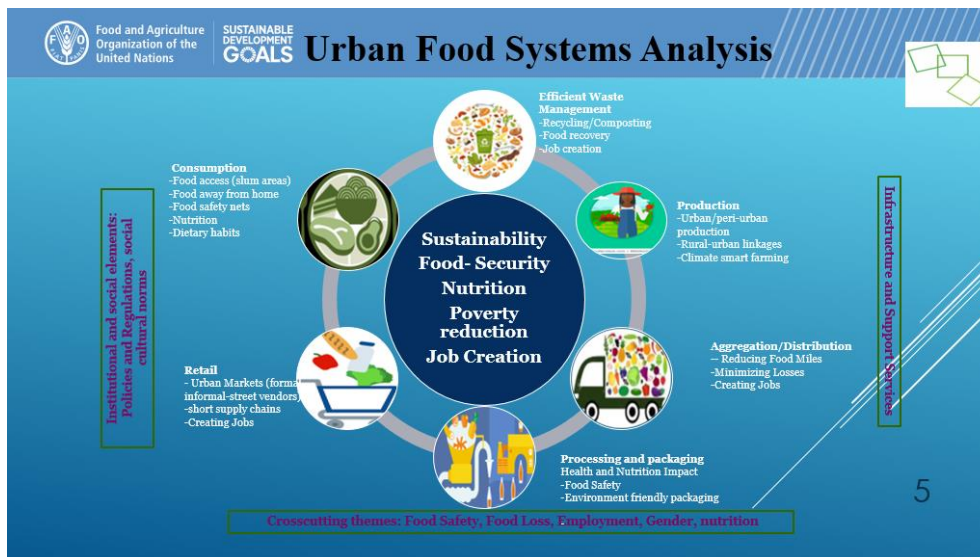
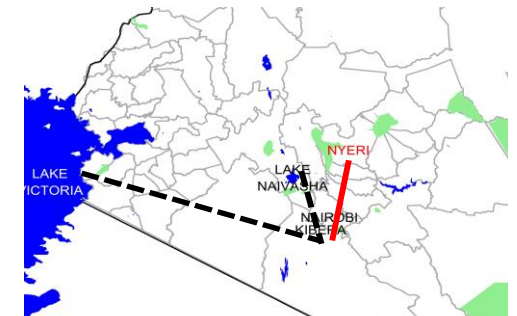


A new Nyeri-Kibera rural-urban fish food system, Main bottlenecks already solved (duration 60 days)

- Health certificate per worker
- Covid-19 certificate
- Single business permit
- Facility/office certification
- Food hygiene license (for food handlers)
- Company registration technicalities
- Taxation regime (PIN certificate, Tax compliant Certificate)
- Business location vs cost issues

Consumer concerns

- Quality of fish/ fish scent, color, shapes, size
- Sources/ origin / location/ trust
- Low costs/ availability/ consistency (supply)/ Customer services/ care



6. WEBINAR 2: STAKEHOLDER REPRESENTATION IN FOOD TRANSITIONS - MAIN PRESENTATIONS

Stakeholder representation through urban food systems and private sector investments:

- AgrInvest – a project aimed at enabling inclusive and efficient private sector investment in agrifood systems.

David Makongo (FAOKE)

The importance of stakeholder representation through urban food systems & private sector investments



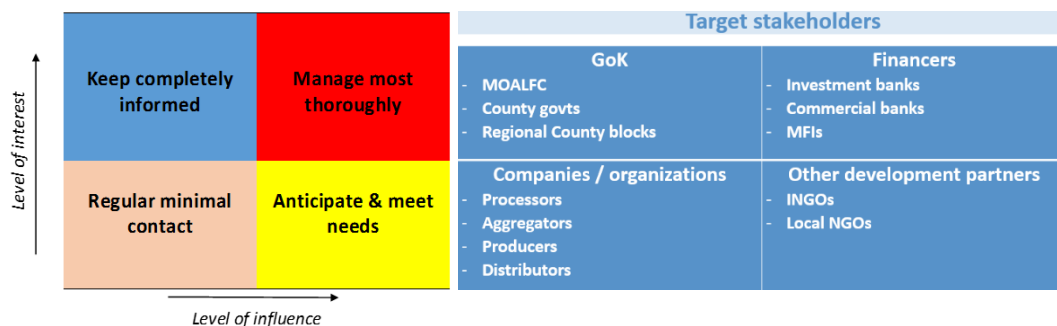
Stakeholder engagement

- Keep in mind the focus of the project
- Create a list of the stakeholders
- Prioritise the stakeholders
- Engage one-on-one
- Hold stakeholder workshops
- Create multi-stakeholder platforms (MSP)

Multi-stakeholder platforms, targeted by AgrInvest

- SDG2 Platform – Food & Nutrition Security Window
- Lake Region Economic Bloc – LREB
- Jumia ya Kaunti za Pwani – JKP
- County Agricultural Sector Steering Committee (CASSCOM)

Target stakeholders and stakeholder map



County Agricultural Sector Steering Committee (CASSCOM)

- Aiming to transform Kenya's agricultural sector and make it a regional powerhouse, the Government has formulated the Agricultural Sector Transformation and Growth Strategy (ASTGS)
- The delivery mechanism for ASTGS will be through the Agricultural Transformation Office (ATO) at the national level and at county level, through Council of Governors (COG) and County Departments of Agriculture
- CASSCOM is responsible for domesticating ASTGS.

Stakeholder representation in the Nyeri-Kibera fish food system:

- 1 tonne of fish brought from Nyeri to Kibera every week
- First time on 8 August 2020

When did aquaculture start in Nyeri?

- Started in 2009 when the government introduced fish farming through Economic Stimulus Programme
- This helped diversify key economic activities (tea and coffee) farming, which were challenged by continuous subdivision of family land, hence leading to little household income

What led to the cooperative society formation?

- With the exit of Economic Stimulus Program, the farmers were left with stocks of fish without any infrastructure for access to input or markets
- It started with the formation of small groups of farmers, which later metamorphosed into the cooperative society

What were/are the challenges in aquaculture sector in Nyeri?

- Lack of proper information
- Lack of quality fingerlings
- Lack of quality fish feed
- Stunted fish

What barriers did you need to overcome to make this new fish food system value-chain work?

- Perceptions about farmed fish vs. lake fish in Kibera
- A misunderstood Chinese fish tag
- Different ways of communications (weight vs. size)
- Organising the farmers
- Sampling/ checking
- Timing of harvest/ collection
- Logistics of harvest/ cleaning
- Transportation

Who benefitted?

- Fish farmers in Nyeri
- Value-chain actors (fish harvesters, fish cleaners, transporters)
- Loaders/salespeople vendors/ consumers in Kibera

Charles Mbauni Kanyuguto (FOSPA)

Stakeholder representation in the Nyeri-Kibera fish food system



7. REFLECTIONS - KEY MESSAGES

Relevant goals of the Kenyan Fish Market

Authorities:

- To market fish, ensure affordable and accessible nutritious food taking account of ever expanding urban areas, such as Nairobi
- Develop fish marketing strategies at local regional and national levels
- Increase production of fish through projects directly, but also through investments in infrastructure, capacity building, and enhancing brooding stocks and fingerlings production
- Adapt regulations as now the small fish sizes are assumed to stem from lakes and rivers, not from farmers.

Governmental support, main areas

- Quality assurance and laboratory services
- Market infrastructure development
- Market information extension services
- Diversification of products
- Market access

International focus of Dutch Ministry of Agriculture, Nature and Food quality:

- Post-harvest and food loss
- Genetic diversity
- Protein transition
- Sustainable commodities (including feed policy)
- Global knowledge innovation and technology partnerships

Private/public partnerships on Agriculture (Fisheries), Food and Water

- Circular agriculture
- Climate-neutral agriculture and food production.
- Climate-proof rural and urban areas, valued, safe and healthy food.
- Sustainable water management and protecting deltas (including building with nature).

Aquaculture

- Efficient form of animal protein in terms of feed, water usage and commission.
- Sustainable fish production creates opportunities for local and foreign investors.
- Analysis shows potentials in Kenyan markets, but interventions are required across the entire value chain for a sustainable growth of the sector.

Jane Kibwage
(Kenya Fish Market Authority
KFMA)

Food systems in research put into practice



Ir. S. (Simkje) Kruidenik & Inge Tenniglo
Ministry of Agriculture,
Nature and Food Quality

Food systems in research put into practice



Insights about stakeholder representation in international investment programmes:

Stakeholder definition

- Individuals and organisations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion (see link 7 below)

Stakeholder groups

- Producers, marketers, input suppliers, end consumers
- Financial Investors
- Government, Research Institutions

Why do we need stakeholder representation in international investment programmes?

- Common goal/ agenda- driven aquaculture production in rural Kenya
- Strengthen various nodes along the aquaculture value chain/fill in gaps
- Project the subsector to higher platforms
- Inject resources to support the subsector either by making direct investments or subsidy arrangements

Empowerment of stakeholders through investment - focus on women involved in the fish value chain:

Why the focus on women in Kenya?

- Aquaculture has potential to contribute to women's economic and social empowerment
- Women are actively engaged in aquaculture production (fresh water & mariculture)
- In Kenya, there are about 1.5 to 1.7 times more women in marketing and processing of aquaculture products than men

Key messages

- When stakeholders are identified and empowered they are able to contribute to the success of the value chain- e.g. training and facilitation of women has enabled them access to loans which they have used to properly manage vessels, coolers, fish shops and trade in larger quantities of fish
- We can identify stakeholder focused innovations which improve women participation and contribute to the sustainability of the fish value chain.

Ruth Mwarabu Lewo
(ABDP)

Insights about stakeholder representation in international investment programmes



Sidi Ngumbao (ABDP)

Empowerment of stakeholders through investments



8. CONCLUDING REMARKS AND FOLLOW-UPS

The Follow-up actions include:*

- 1) A series of scientific articles to be published in the Special Issue: **Sustainability Development of Resilient Urban Food Systems—Exploring Synergies and Making Priorities**: [LINK SPECIAL ISSUE](#) (deadline to submit October 2021).
- 2) A series of scientific articles based on research in Kibera including a household survey conducted in August 2020 by Egerton University including a total of 396 households will be written and published.
- 3) Local circular approaches will be developed, to ensure the small-scale fish farming value-chain with on-farm produced feed of insects and microphytes, good quality fingerlings, organic water circularity, and value-added by processing of fish products into sausages, burgers, soups and filet.
- 4) A follow-up Webinar is planned for 2021.

Responses by the audience

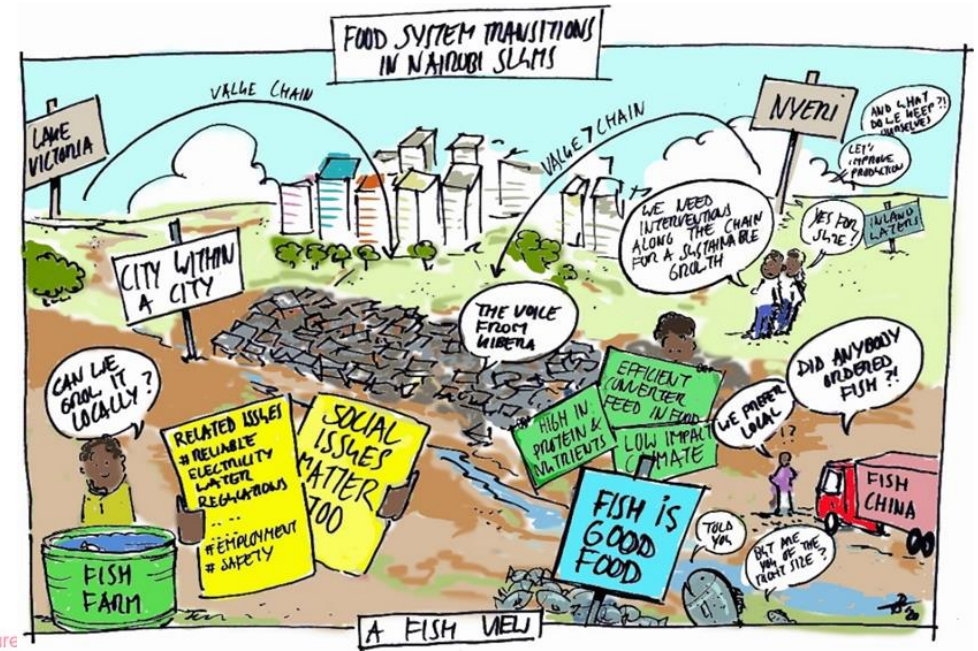
What do you think are the main barriers to ensure nutrition for all?

What is the best way to ensure stakeholders needs are well represented?



*The 'Feeding cities and migration settlement project' a project carried out by Wageningen University & Research (WUR), part of a strategic research programme knowledge base (KB) programme 'Food Security and Valuing Water', commissioned and financed by the Dutch Ministry of Agriculture, Nature and Food Quality.

**Food and Agricultural Organization in Kenya (FAOKE) currently carries out two relevant projects in Kenya: 1) the 'Integrated Actions for Innovative Food Systems across Rural-Urban Communities Project' is supported by the Italian Agency for Development Cooperation (AICS), with the main goal of developing sustainable food systems that deliver affordable, safe and nutritious foods for urban populations; 2) The FAO corporate initiative AgrInvest is aimed at fostering private sector investment in food systems that is aligned with the SDGs, contributing to economic growth, generating employment in rural economies – in particular for women and youth, improving livelihoods, promoting gender equality and reducing poverty.



- 1) AgrilInvest project (FAO). Project flyer: at: "<http://www.fao.org/3/ca8944en/CA8944EN.pdf>" and <http://www.fao.org/in-action/aqrinvest-food-systems>
- 2) Feeding cities and migration settlement project (WUR): <https://www.wur.nl/en/Research-Results/kennisonline/Feeding-cities-migration-1.htm>
- 3) van Berkum S, et al. 2020 (WUR). <https://edepot.wur.nl/524538>
- 4) Kibera documentary (WUR): https://www.youtube.com/watch?v=K_goJu2encq&t=6s
- 5) Nyeri fish farm documentary (WUR): <https://www.youtube.com/watch?v=xH3itzOKWOY>
- 6) The Nyeri-Kibera Workshop report (WUR): <https://www.wur.nl/en/Publication-details.htm?publicationId=publication-way-353638303433>
- 7) PMI: <https://www.pmi.org/learning/library/stakeholder-analysis-pivotal-practice-projects-8905>

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