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Cover photo: Net-mapping chart group work at the workshop on stakeholder mapping in Kapsabet, Nandi County, Kenya (credit: ILRI/Walter Kibet).

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Acronyms

ADS-NR	Anglican Development Services, North Rift Region
AFC	Agricultural Finance Corporation
ASDSP	Agriculture Sector Development Support Program
CBO	Community-based organization
GHG	Greenhouse gas
HCD	Horticultural Crops Directorate
ICIPE	International Centre of Insect Physiology and Ecology
ILRI	International Livestock Research Institute
KALRO	Kenya Agricultural and Livestock Research Organization
KCB	Kenya Commercial Bank
KCC	Kenya Cooperative Creameries
KDB	Kenya Dairy Board
KEPHIS	Kenya Plant Health Inspectorate Service
KFS	Kenya Forest Service
KMC	Kenya Meat Commission
KTDA	Kenya Tea Development Agency
KWFT	Kenya Women Finance Trust
LL4P	Living Lab for People
NARIGP	National Agricultural and Rural Inclusive Growth Project
NCPB	National Cereals and Produce Board
NEMA	National Environment Management Authority
NGO	Non-governmental organization
Sacco	Savings and credit cooperative society

Why stakeholder mapping on low-emission food systems?

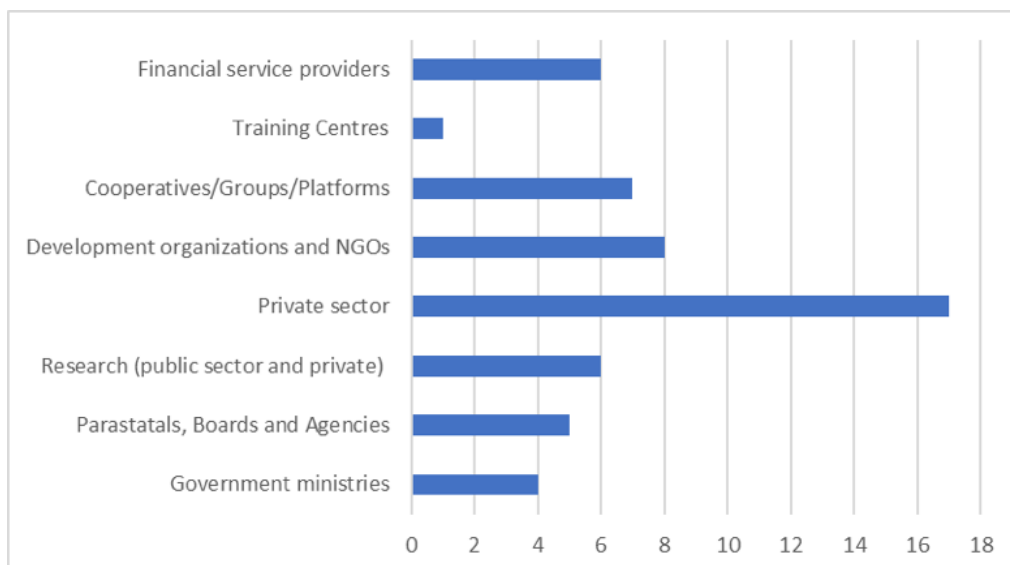
The CGIAR Initiative on Low-Emission Food Systems focuses on reduction of greenhouse gas (GHG) emissions while transforming food systems. It intends to work closely with key actors in the target countries, supporting them with new knowledge, information and tools to make robust evidence-based decisions as they confront challenges in food system transformation discourses, policy development and the reduction of GHG emissions. In Kenya, Nandi County has been selected as a site for a Living Lab for People (LL4P) on low-emission food system development.

The development of a LL4P requires a clear scope and specific objectives from the stakeholders' perspective. There is need to have clarity on the benefits, establish the users of the LL4P and take into consideration the power dynamics involved. Open discussions on the sustainability of a LL4P prior to its establishment are paramount. Clear roles among the stakeholders involved in the food system should be specified to minimize the possibility of conflicts and manage unrealistic expectations. However, these definitions cannot be provided by researchers alone but require a multistakeholder approach (Habermann and Zhang 2022).

Given the importance of stakeholders in the setting up of a LL4P, it is imperative to understand the actors involved in the food system within the county. Net-Map is a method for visualizing and making explicit several phenomena that structure decision-making arenas (Schiffer and Hauck 2010). It serves as a tool for understanding a food system from a stakeholder point of view. A net-map helps us to understand the actors involved in the food system, the nature of their linkages, the extent of their influence on the what and whom, and their goals:

Net-maps can take very different shapes and forms, depending on the dynamics in the groups working on them. Some people create categories from the start and orderly rows of Post-it; others spread them out all over the place. Some groups will only make a few arrows; others create a spider web of the highest order. There is no right or wrong: creativity and group dynamics determine what it is going to be (Habermann 2022).

Figure 1: Graph showing the numbers of stakeholders in the categories identified as important in the Nandi County food system. (Jalang'o, Korir et al. 2022)



Net-mapping workshop

The overarching objectives of the workshop were to:

1. Clarify the goal, objectives and targets of the project.
2. Identify actors and their roles in food system transformation in Nandi County.
3. Establish the interactions and the level of influence among various stakeholders.
4. Develop a visual representation of stakeholders, their influence and their roles in food system transformation and reduction of GHG emissions.

Actors in a food system

For net-mapping, choosing the composition of participants is important. The research team went through several cycles of pre-selection before agreeing on the final list of participants. The participants had to be actors engaged in at least one component of the food system in Nandi County or represent a national organization with an interest in the county's food system.

The selection was based on a report commissioned by the same project (Jalang'o, Korir et al. 2022). This report was a situational and stakeholder-focused analysis on low-emission food system development in Nandi County and it provided an overview on the stakeholders to be involved in the project (Figure 1). Following the preliminary findings of this report (Jalang'o, Korir et al. 2022), workshop participants were drawn from various sectors, ranging from farmer organizations to individual farmers, county ministry of agriculture staff, the private sector and non-governmental organizations (NGOs). The actual participants represented all these groups but there was a disproportionately high number of government actors and very low participation of the private sector as well as farmers' representatives (Table 1).

Providing a frame for net-mapping

Net-mapping is more than making a nice diagram in a group. It is a lot about the dialogue and how people learn from each other (Schiffer 2007). It can also serve as a planning tool, and it can happen repeatedly as part of the process, which shows how people learn and change their perception as they continue working together (Schiffer 2007).

To be able to facilitate discussion on a common understanding of what the wider topic would be, the introduction to the workshop was important. At the beginning, the facilitator explained the goals and objectives of the project and the workshop, both based on the development of a LL4P in Nandi County.

An important actor for the LL4P to consider is the Nandi County Government. Thus, the opening speech of the County Executive Committee (CEC) member for agriculture and cooperatives was very important. In his speech, the CEC member underscored the importance of working together to reduce GHG emissions at various levels of the food system. He further mentioned that Nandi County was yet to develop specific structures to aid in measuring, reporting and verifying GHG emissions, particularly from the agricultural sector.

Table 1: Workshop participants by organization type and gender.

	Organization type	Gender		Total
		Female	Male	
1	Government	5	17	22
2	NGO		2	2
3	Private sector		1	1
4	Farmer organizations	2	2	4
5	Individual farmers	2	1	3
6	Research and learning institutions		2	2
	Total	9	25	34

Documentation of results

The workshop had two breakout sessions with different objectives.

Breakout session 1

The first breakout session was for participants to get to know each other. It included a group of participants from another work package (4) of the Initiative on Low-Emission Food Systems, who had just come from their planning week and wanted to meet stakeholders in Nandi County in an informal setting.

To facilitate a casual session, participants were divided into seven groups, each with a mix of genders, places of work, and counties and countries of origin. The group members shared information on areas of interest and other details. This was also an ice breaker for the actual net-mapping workshop later.

Table 2: Group discussions among participants (breakout session 1).

Group	Areas of discussion
Group 1	<ul style="list-style-type: none"> • The CGIAR initiative • Professional information since most were from different specializations in the agricultural field • Food system transformation, from production to consumption • Farming systems in Nandi and major crop enterprises such as tea production
Group 2	<ul style="list-style-type: none"> • Crops such as tea and maize alongside their ecological requirements • Technologies available for upscaling • GMO politics in Kenya and Cameroon
Group 3	<ul style="list-style-type: none"> • Integrated food systems (production and storage) • Extension service provision and interactions with the farming community • Farmer-to-farmer extension, where farmers learn from other successful farmers • Strategies of involving youth in the food system • Smallholder tea production in Kenya in comparison with tea production in Sri Lanka
Group 4	<ul style="list-style-type: none"> • Members' contribution to food system transformation • Experiences in activities related to conservation agriculture

Group	Areas of discussion
Group 5	<ul style="list-style-type: none"> • Policies that support the reduction of GHG emissions • Nandi's unique agroecological zones • Emissions in coffee production and transportation • Aquaculture and its low GHG emissions compared to other types of farming • Everyday work and how it contributes to lowering emissions
Group 6	<ul style="list-style-type: none"> • Effects of GHG emissions: climatic changes that have led to erratic and unreliable rainfall distribution • Solutions to low productivity at farmer level and data to help in decision-making on aspects related to climate change • Data as a starting point to the generation of solutions • Farmers' adoption of feed conservation lots, zero grazing, livestock breeding and disease control
Group 7	<ul style="list-style-type: none"> • Individual contribution to the reduction of GHGs and what can be done to reduce quantity and frequency • Reduction of emissions through the adoption of low-emission food production methods • Use of GHG emission-reducing appliances at household level • Strategies of reducing emissions in different countries • Farmers in Kenya focus more on the production of maize compared to tea, coffee, dairy and beans: can the farms in the county change their practices? • Prevention of further soil degradation and excessive use of inorganic fertilizers to help in reducing GHG emissions

Break out session 2

The main objectives for this session were to:

1. Map the stakeholders within the county.
2. Indicate the stakeholders' level of influence on reduction of emissions; and
3. Indicate the direction and strength of influence among the stakeholders.

Workshop participants were randomly divided into four heterogeneous groups. The groupwork was done in two sessions, addressing these questions:

1. Who is involved in the Nandi County food system? Which of these actors can play a role in reducing GHG emissions?
2. What are the linkages between the actors, and how do they relate and influence each other?
3. Who are the more influential actors?

Question 1

After listing the different groups of stakeholders on different colour sticky notes (Figure 2), the participants grouped the actors on a flipchart. The groups did this in diverse ways, but the facilitator did not intervene and let participants do this activity in the way they believed worked best for them. Examples of the stakeholders listed were government and non-governmental organizations, research organizations, civil society, middlemen and traders, food processors, consumers and producers/farmers.

Figure 2: Labelling different stakeholder groups using different colours (photo credit: ILRI/Birgit Habermann).

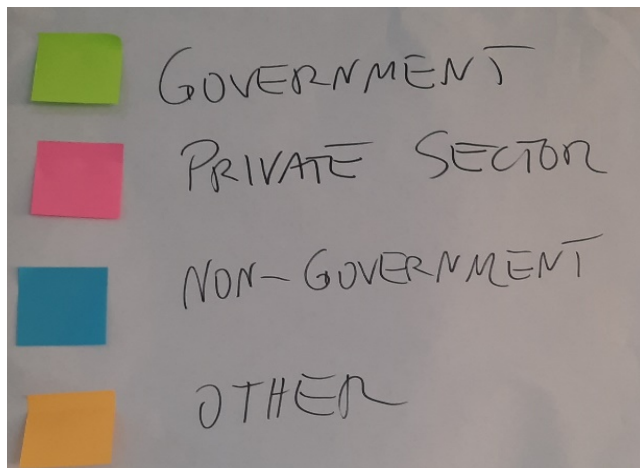
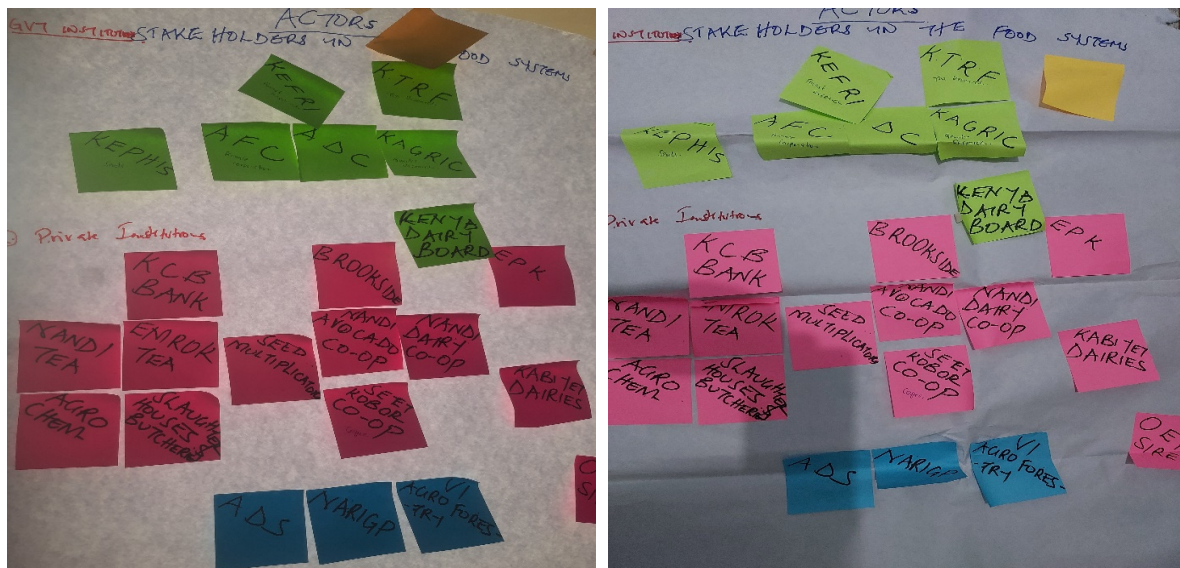


Figure 3: Different ways of listing stakeholders involved in the food system in Nandi (photo credit: ILRI/Kibet Walter).



Question 2

Once the actors were listed and the sticky notes placed on the flipchart, the groups drew the linkages between them. These linkages explained the types of interaction between the actors and ways of influencing each other. These links can be financial but could also be related to other resources, tangible and intangible. The relations defined by the groups were mostly information and financial flows. In most cases, the relations were mutual.

Question 3

In this final round, participants debated how influential the listed actors were in shaping the future of the food system in terms of low-emission development in Nandi County. For this, they had to allocate one to five blocks as degree of influence, with one being the least influential and five the most influential. This required some discussion to create meaning in this context: e.g. if the local government had only one block while the church had three, this needed to be justified.

Group presentations

Each group presented its net-map then answered questions from the other groups. The discussion focused mainly on the explanation of the map then the specified stakeholder roles and influence in reducing GHG emissions. Participants also discussed possible ways different stakeholders could mitigate/reduce GHG emissions.

Group 1: Discussions and outputs

The group listed various stakeholders that have a role in Nandi County's food system. These stakeholders were consolidated into four categories as indicated below.

Government stakeholders were mainly parastatals and state departments. State departments included the Ministry of Agriculture and Ministry of Environment and Natural Resources whereas parastatals included Kenya Seed Company, Kenya Dairy Board (KDB), Kenya Plant Health Inspectorate Service (KEPHIS), National Environment Management Authority (NEMA), Kenya Forest Service (KFS), Kenya Agricultural and Livestock Research Organization (KALRO) and government-affiliated training institutions such as universities.

NGOs included Anglican Development Services North Rift Region (ADS-NR), Heifer International, Digi Cow, One Acre Fund and Apollo Agriculture.

Private sector stakeholders listed by group 1 were Hello Truckers, fodder processors, other processors such as dairy processors, financial institutions operating within the county, seed companies and private training institutions.

Farmers and farmer-led organizations were identified as major stakeholders in the food system in Nandi County. Examples were farmer groups, community-based organizations, farmer cooperatives and savings and credit cooperative societies (saccos).

Most group members said policymakers have the greatest role in reducing GHG emissions. Those listed included government institutions such as NEMA, KEPHIS, KFS and the Ministry of Agriculture and research institutions such as International Livestock Research Institute (ILRI), International Centre of Insect Physiology and Ecology (ICIPE) and KALRO. Processors and traders were said to have the least influence in reducing GHG emissions because they focus more on maximizing profits from their enterprises.

Although exporters were categorized as among the least influential in reducing GHG emissions, the group pointed out that they had the greatest potential to influence the rest of the stakeholders. This can happen if exporters set up standards that reduce emissions along the supply chain (e.g. from farmers using efficient production techniques to transporters adopting less GHG-emitting modes of transport).

Financial and information flows between most stakeholders were mainly double arrows, indicating exchange of information and flow of financial resources both ways. This implies that stakeholders share information and do business with each other. Specifically, there is

a flow of information from research institutions to government agencies responsible for making decisions regarding policy although there is a limited flow of financial resources in this regard.

From the group activity, there is a steady exchange of information and financial resources between the private sector and the government. Ideally, the government regulates the private sector through provision of relevant information whereas the private sector provides the government with information (data) for decision-making. On the other hand, there is financial flow from the private sector to the government in form of fees and levies.

The group reported financial flow as well as information flow from the other sectors to the farmers and farmer organizations. This highlights the importance of farmers and farmer organizations in relation to other stakeholders in a food system.

Figure 4: Net-mapping chart indicating stakeholders, their interactions and influence in reducing GHG emissions (group 1) (photo credit: ILRI/Walter Kibet).

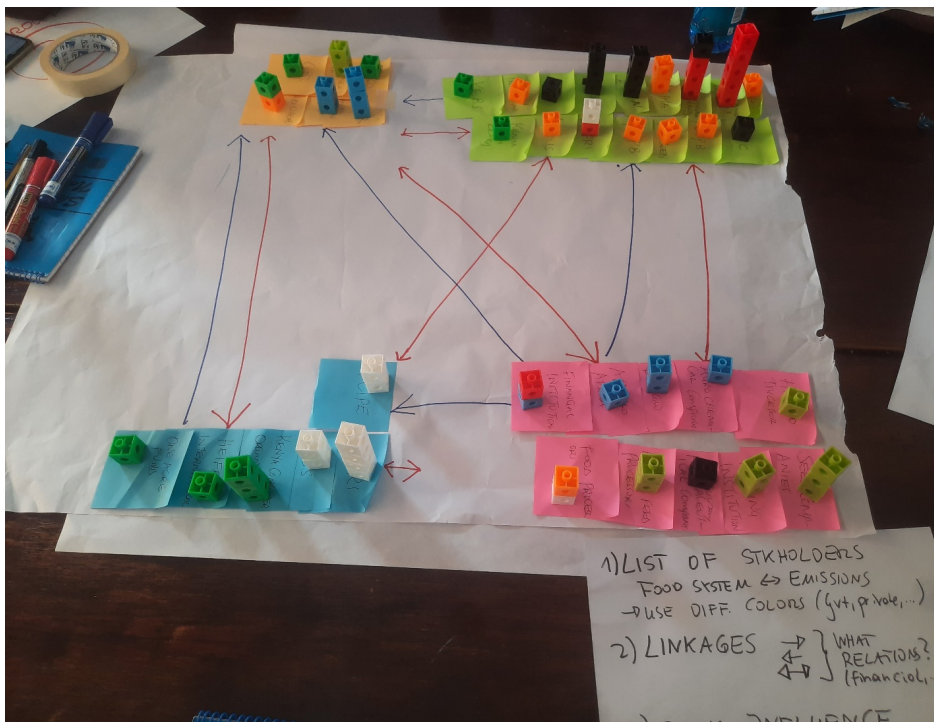


Table 3: Importance and influence among food system stakeholders

Least influential	Medium influence	Most influential
Heifer International	ICIPE	ILRI
Kenya Consumer Organization	ADS-NR	One Acre Fund
Saccos	Farmer cooperative societies	County Department of Agriculture
Farmer groups	NEMA	KFS
Community-based organizations (CBOs)	Apollo Agriculture	Ministry of Environment and Natural Resources
Kenya Meat Commission (KMC)	Hello Truckers	Digi Cow

Least influential	Medium influence	Most influential
National Cereals and Produce Board (NCPB)	Training institutions	Seed companies
Kenya Seed Company	Fodder processors	Farmers
KEPHIS	Financial institutions	
KDB		
Kenya Cooperative Creameries (KCC)		
KALRO		

In the end, group members were able to arrive at a consensus with regard to the influence of various stakeholders in the reduction of GHG emissions. According to group 1, the most influential stakeholders were mainly from the government and NGOs, with only seed companies representing the private sector in this category. Stakeholders with medium influence were drawn from all the sectors (the private sector, the government and non-governmental institutions). The least influential stakeholders in reducing GHG emissions according to group 1 were mainly from government parastatals and the private sector.

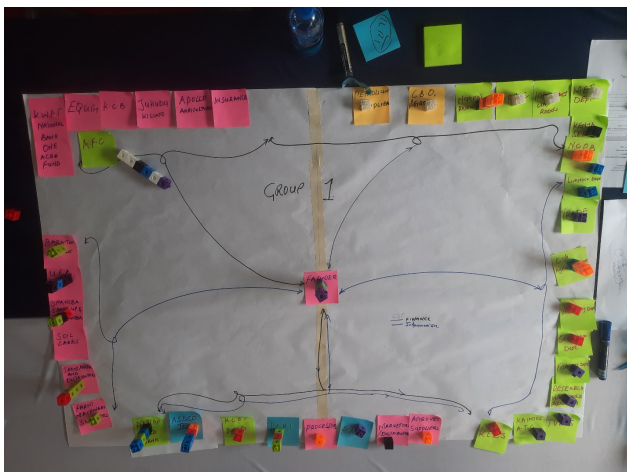
Group 2: Discussion and outputs

In group 2, various actors/stakeholders in the food system in Nandi County were mapped out. Sectors listed by the group included the private sector, the government, non-governmental institutions and other sectors lumped together.

This group identified farmers as playing the greatest role so they placed them at the centre of the food system. Relationships between various actors such as government research institutions, NGOs and agripreneurs focused on the farmers. This reinforces the fact that farmers play the greatest stakeholder role in the food system.

In their discussions, the group indicated that private sector players have the least will and influence in reducing GHG emissions. According to the group, this is because of the limited fund allocation coupled with low efforts in reducing GHG emissions in their operations.

Figure 5: Chart presenting stakeholders in the food system in Nandi County and their influence and interactions (group 2) (photo credit: ILRI/Walter Kibet).



The arrows in Figure 5 represent financial and information flow, which in most cases flow both ways between stakeholders. Exchange of resources seems to be common among stakeholders, according to the discussions in group 2.

Generally, policies guiding farming have the greatest influence in emission reduction, in this group’s opinion. This is because with clear regulations, producers and other actors in the food system are compelled to reduce GHG emissions.

Group 3: Discussions and outputs

The major stakeholders identified by this group were 1) farmers (producers) such as maize, poultry and tea farmers, and 2) policymakers. Other stakeholders such as financial institutions, exporters, waste managers etc. were noted to contribute to emissions although at a lower scale. Almost all of them were said to have the potential to lower GHG emissions. Policymakers were listed as the most influential actors when it comes to the reduction of the emissions since they have the responsibility of enforcing regulations, leading to the reduction of GHG emissions.

Table 4: List of important and influential stakeholders (group 3).

Least influential	Medium influence	Most influential
<ul style="list-style-type: none"> • Agrodealers • Kenya Seed Company • Farm machinery suppliers 	<ul style="list-style-type: none"> • Financial institutions • Equity Bank • Kenya Commercial Bank (KCB) • Juhudi Kilimo • Agricultural Finance Corporation (AFC) • Kenya Women Finance Trust (KWFT) 	<ul style="list-style-type: none"> • Service providers • Soil Cares • Baraton College • Baraton University
Processors	<ul style="list-style-type: none"> • Other related county departments • Agriculture Sector Development Support Program (ASDSP) • National Agricultural and Rural Inclusive Growth Project (NARIGP) • Kenya Meteorological Department • Livestock Department • Natural Resources Department • Kaimosi Agricultural Training Centre 	Producers Farmers Cooperatives
<ul style="list-style-type: none"> • Transporters • Distributors 	Consumers	Tea exporters
	Cottage industries	<ul style="list-style-type: none"> • Researchers • ILRI • KALRO
		<ul style="list-style-type: none"> • Policymakers • County government • National government

The group listed researchers and non-governmental organizations as key contributors to the reduction of emissions. This is because they provide information, particularly strategies, for reducing GHG emissions.

Farmers, on the other hand, were listed as key stakeholders who are central to the food system in Nandi County. Therefore, this group classified farmers as critical actors in reducing GHG emissions. Given producer operations, the group agreed that they contribute to high levels of emissions. Conversely, there is potential for the reduction of such emissions.

According to the conclusions made by the group, financial institutions play the least role in reducing GHG emissions and therefore have low influence. Traders have limited influence when it comes to the reduction of GHG emissions although they have high potential to adopt emission-reducing technologies.

Group 3 noted that exporters have a great role in reducing GHG emissions as they can influence reduction of emissions at farm level. Exporters have the capacity to influence production and, in some cases, process their products before exporting. Hence exporters can set standards for production and processing, which can then reduce GHG emissions.

In Figure 6, information flow among stakeholders is indicated in the chart using continuous arrows whereas financial flow is indicated with dotted arrows. The level of influence in reducing GHG emissions is represented by the blocks, with fewer blocks for the less influential and more blocks for the most influential.

Figure 6: Net-map with various stakeholders and their influence (group 3) (photo credit: ILRI/Walter Kibet).



Resource and information flow, to a large extent, determine the level of influence a stakeholder has in relation to the other stakeholders. According to group 3, financial institutions are at the centre of all financial flows to and from other stakeholders. The group indicated financial flow from traders to exporters, from producers to processors as well as from producers to exporters. Almost all financial flow is a web among stakeholders and so is the influence between them (Figure 6).

Although information flow is limited to a few stakeholders, the group reported this flow as a critical aspect that determines the relationships and extent of influence between the actors listed. The most important information flow, according to group 3, is the flow of information from policymakers to service providers. Information is passed from service providers to exporters as well as from researcher to service providers.

Group 4: Discussions and outputs

The focus in this group was on the food production system. Stakeholders were clustered into four distinct categories according to their roles in the food system (Figure 7): producers, processors, marketers and consumers. Evidently, farmers play an important role in the food production system. As indicated by the group, farmers are key to adopting technologies that can reduce GHG emissions at production level so they have great influence in reducing these emissions (Table 5). According to the group, such adoption will happen with the help of other influential stakeholders such as the county government and government parastatals. Processors are less influential, the group noted. They are dependent on government policies with regards to reduction of GHGs, although processors have higher propensity to adopt emission-reducing technologies such as solar energy.

Table 5: Classification of stakeholders in a food system according to their importance and influence (group 4)

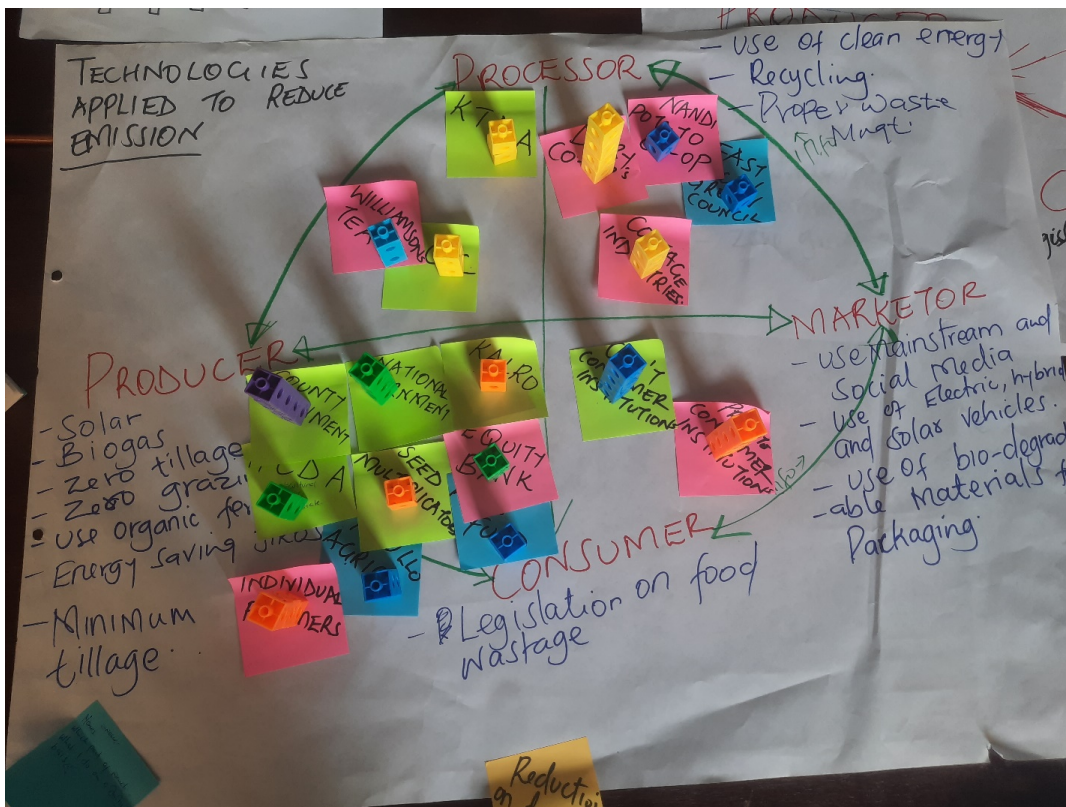
Least influential	Medium influence	Most influential
Financial institutions <ul style="list-style-type: none"> • Kibiyet Sacco • Cooperative Bank • KCB • Family Bank • Nandi tea saccos • Access Bank • KWFT 	National government <ul style="list-style-type: none"> • Consumers • Schools • Hospitals • Hotels and restaurants 	<ul style="list-style-type: none"> • County government • County assembly • Ministry of Agriculture
East Africa Grain Council	<ul style="list-style-type: none"> • Horticultural Crops directorate (HCD) • KDB • KEPHIS 	Individual farmers <ul style="list-style-type: none"> • Maize producers • Poultry producers • Coffee farmers • Dairy farmers • Tea farmers • Horticulture farmers
Seed merchants <ul style="list-style-type: none"> • Kenya Seed Company • Western Seed Company 	Apollo Agriculture	Dairy cooperatives

Least influential	Medium influence	Most influential
	<ul style="list-style-type: none"> Cottage industries Coffee processors 	Potato cooperatives
Waste management	Kenya Tea Development Agency (KTDA)	National government
	Williamson Tea	KALRO

This group stated that stakeholders that influence conservation and use of natural resources have high influence in reducing emission. For the food system in Nandi County to function well, information and financial resources must flow both ways. From the group discussion, giving the right information to the farmers and formulating favourable government policies can be instrumental in reducing GHG emissions. No single actor can provide comprehensive information; it requires synergy or a holistic approach, the group observed.

From the group discussions, each category of influencers had specific possible inventions that could reduce GHG emissions. For instance, the group suggested that producers can potentially reduce emissions by adopting solar energy, biogas, zero tillage, organic fertilizer, energy-saving 'jikos' and minimum tillage. On the other hand, as discussed, processors can adopt the use of clean energy, recycling of materials and proper waste management. Stakeholders performing marketing functions have the potential to reduce GHG emissions through the use of social media in advertisement, use of electrical/solar-powered vehicles and adoption of biodegradable packaging materials. Consumers can adopt legislation on food wastage as a way of reducing GHG emissions.

Figure 7: Net-map depicting interactions among various stakeholders and their influence on each other in Nandi County's food system (group 4) (photo credit: ILRI/Kibet Walter).



Conclusion

The workshop served to create more familiarity between stakeholders and the research group. Furthermore, it provided a first glimpse of the range of stakeholders involved in the food system in Nandi County and their different roles and spheres of influence. There were some differences, such as the ranking of stakeholders' influence with regard to the reduction of GHG emissions alongside its justification, but also important similarities between the groups. One similarity that stood out was that almost all groups put farmers at the centre of the food system in Nandi County. Secondly, participants saw policymakers as the major influencers when it comes to reduction of GHG emissions.

Establishment of a LL4P was seen as an important opportunity for Nandi County. The LL4P provides a platform for nurturing ideas on GHG reduction and mitigation within a food system. The workshop on net-mapping elicited discussions on how collective action among stakeholders can be leveraged in reducing GHG emissions.

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Annexes

Annex 1: Net-mapping tool

Selection of participants: A desk study was carried out that resulted in a list of stakeholders for Nandi County. These organizations and individuals will be invited to participate in the net-mapping. They have been selected from the government, NGOs, the private sector and civil society because of their roles in the food system of Nandi County. Farmers will be represented by the cooperatives for different commodities.

Number of participants: 30

Data collection: The net-mapping will be taking place in groups at a workshop in Kapsabet. The groups will be selected randomly using numbers. Each group has a facilitator assisting with the mapping and documentation.

Use of data: The data will only be used for the project and in reports and publications but in an anonymized way. While the researchers know who was in which group, this information will not be published.

Guidelines

After the groups have been formed, the facilitator joins their group. Each group needs a flipchart, markers and pens, multi-coloured sticky notes plus a set of toy bricks or something similar.

What is a net-map?

It is a mapping tool based on group interviewing to visualize and discuss certain situations where many different actors can influence outcomes. A net-map helps to understand which actors are involved in the network, the nature of their linkages, the extent of their influence (on what and whom) and what their goals are (Schiffer 2007).

Questions

1. Who is involved in the Nandi County food system? Which of these actors can also play a role in reducing GHG emissions?
2. What are the linkages between them, and what types of relations and ways of influencing each other do we know?
3. Who are the more influential actors?

Divide participants into groups depending on the total number. Please remember that this exercise needs to be documented so each group needs someone who is doing that.

The questions to be asked for the net-mapping exercise in our case are:

- **Step 1:** a) Who is involved in the Nandi County food system? b) Which of these actors can also play a role in reducing GHG emissions? Examples are government and non-

governmental organizations, research organizations, civil society, middlemen and traders, food processors, consumers and producers/farmers. Write the different names on sticky notes, choosing different colours for different categories such as farmers, research institutions, extension services, NGOs and the private sector. Mark the ones that can play a role in reducing GHG emissions with a dot.

- **Step 2:** How are these actors linked? Make connections by drawing arrows from one actor to the other. We use two categories, financial and information; please allocate different colours to each. Mutual relations are indicated by arrow heads at both ends.
- **Step 3:** How influential are these actors in shaping the future of the food system in particular in terms of low-emission development? Now allocate 1–5 blocks as degree of influence, with 1 with being the least influential and 5 the most influential. This will require some discussion. Ensure that the participants are aware of the relational character of this exercise, so if the local government has only one block and the church, for example, has three blocks, then this needs to be discussed.

Annex 2: Informed consent for net-mapping

Research topic: A Living Lab 4 People on Food system Innovations for Climate Change Mitigation

Introduce your name and your role in the project.

I am from the International Livestock Research Institute (ILRI) based in Nairobi. ILRI works with partners worldwide to enhance the roles that livestock play in food security and poverty alleviation in Africa and Asia. ILRI is implementing the CGIAR initiative Low Emission Food Systems (Mitigate +). The CGIAR Initiative on Low-Emission Food Systems, also known as Mitigate+, works closely with key actors in the target countries so that they are equipped with the knowledge, information and tools they need to make robust evidence-based decisions as they confront challenges in food system discourse, policy development and implementation to reduce GHG emissions.

You were selected for this exercise based on a situational analysis on the food system in Nandi County. You were identified as an individual/an organization/someone representing an organization with a stake and an interest in the low-emission development of the food system in Nandi County.

The net-mapping exercise that you are participating in helps to understand which actors are involved in the Nandi County food system, how these actors are linked and the extent of their influence (on what and whom). We will ask you related questions, and you can provide the answers in a visualization exercise on a flip chart together with others in a randomly composed group. We will not be able to show what exactly you have answered and your participation in the exercise remains anonymous.

The information you provide will help us to understand who has to be involved in further discussions about the future of low-emission development in the food system in Nandi County, and whom to involve in a multi-stakeholder platform and a so called 'living lab' that will support bottom-up innovation cases in Nandi County at a later stage, provided funding can be secured for this entity.

We will not share any personal details with anybody else, and you may skip questions or withdraw at any time. The data recorded will only be shared with research colleagues within ILRI and our partners in the CGIAR (a group of related international agricultural research organizations that ILRI belongs to), and not to any outside entities.

Benefits to the respondent/discussant

Please note that this is a research project without any development or intervention component. We cannot offer you any long-term benefits based on today's discussion. However, we will share our findings on this research on a regular basis in an informal way, in a public workshop and in a final report that is publicly available. This will take some time, but feel free to contact B.Habermann@cgiar.org if you want to know more about this.

About the interview

- This discussion should take approximately one hour. Your name will not be used in any reporting and the information, if used, will be kept anonymous.
- You are free to decide if you do not want to participate at any time. If you agree to participate, please tell us when a question is unclear to you.

Privacy and confidentiality

The notes will be considered confidential. Once ILRI and its partners in the CGIAR have completed analyses of these materials, ILRI will discard them through means that guarantee confidentiality.

The reports generated from these data will also uphold discussants' confidentiality. The findings of this study will be shared appropriately by ILRI through feedback sessions.

Voluntary participation

Participating in the survey is voluntary and choosing to withdraw will not affect you or your relationship with ILRI now and in the future. ILRI will not tell anyone about your objection to participate. You are free also not to answer any question that makes you uncomfortable. Giving my consent (discussant/respondent) to the publication of the data collected will not lead to me receiving any monies or gifts now or in the future unless specified by ILRI.

Approval of the research in Kenya: _____

Provision of a witness: For participants that are either illiterate or mentally incapacitated or physically handicapped, a witness may be provided.

Please indicate the type of informed consent:

**Photograph Videotape Audiotape Data collected and entered on tablets/
sheets**

**Contact details: for questions regarding this study, please contact any of the following
For questions regarding participation rights and welfare, please contact**

Discussant's declaration: 'I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I had have been answered to my satisfaction. I consent voluntarily to participate in this study and understand that I have the right to withdraw from the discussion at any time with no consequences.'

Researcher's name _____ Signature _____

Date _____

Discussant/respondent's name _____ Signature/thumbprint _____

Date _____

Witness' name _____ Signature/thumbprint _____

Date _____

Annex 3: Program for the net-mapping workshop

Stakeholder workshop of the CG Initiative on Low-Emission Food Systems (Mitigate+)

Venue: Allen Hotel, Kapsabet

7 December 2022

Time	Activity/topic
09:00–09:30	Registration of participants
09:30–10:00	Welcome remarks
10:00–11:00	<ul style="list-style-type: none">• Introducing objectives of meeting and overview on Mitigate+:• Introduction of WP4 team and plans• Q & A session
11:00–11:30	Health break
11:30–12:30	Group work: mapping food system actors
12:30–01:30 p.m.	Lunch break
1:30–2:30	Group work: <ul style="list-style-type: none">• Linkages and spheres of influence, preparing for feedback round
2:30–3:30	Group presentations and discussion
3:30–4:00	Health break
4:00–4:30	Open questions and way forward



INITIATIVE ON
**Low-Emission
Food Systems**

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