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Understanding the Policy Landscape for Climate Action in Kenya

Potential for Integration of Gender, Nutrition, and Improved Impact Monitoring

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Zahid ul Arefin Choudhury passed away before this work was completed.

Abstract

As in other low- and middle-income countries, more intense climate hazards and a warmer climate negatively impact agricultural production and livelihoods of smallholder farmers in Kenya, as well as household diets, national food security and gender equality. Improving climate policy and investments to address these negative impacts requires suitable policy and investment structures that are, moreover, adequately networked among each other and with equity and nutrition efforts for effective climate action. This paper explores the institutional arrangements of the climate change policy landscape in Kenya by mapping governmental and non-governmental actors involved in climate action and how connected and influential they are. Data for this paper was collected through two participatory workshops, one at the national level and one at the county level, using the Net-Map approach. This approach provides novel insights into the highly complex climate policy landscape in Kenya. Although several climate policies and actions are in place in the country, workshop participants called for better coordination across climate change actors and stronger implementation capacity. The recent structural changes in the donor landscape might be an entry point for better alignment and coordination among different actor groups, and specifically among different government actor groups. A lack of operational monitoring and evaluation systems was also considered an important impediment to assess to what extent women and other vulnerable groups are benefitting from climate action in the country.

Keywords: Stakeholder mapping, Kenya, climate change, gender, nutrition

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1. Introduction

In Kenya, the agricultural sector contributes about 22 percent to the country's gross domestic product (GDP) and employs more than 30 percent of the workforce (KNBS 2024, World Bank 2022). Climate change particularly affects the smallholder production, which is predominantly rainfed and accounts for 95 percent of all farms in the country (Kilimo 2019). In recent years, climate extreme events – in particular droughts - have become more frequent and severe in Kenya's arid and semi-arid lands (ASALs), a region with high rates of poverty (Kalele et al. 2021, Lamanna et al. 2020, Marigi et al. 2016). Floods have also increased in intensity with the 2024 floods affecting most of Kenya's 47 counties (Kenya Red Cross 2024). Changes in climate extremes and warming patterns have been experienced in all five agroecological zones of the country, i.e. the arid, semi-arid, sub-humid, humid and tropical highlands (Lamanna et al. 2020, Cuni-Sanzhez et al. 2019, Kalungu et al. 2013, Silvestri et al. 2012). Such trends are likely to continue with climate projections estimating that average temperatures in Kenya are likely to increase by 1-2.4°C by the 2050s (World Bank 2021).

Studies also show that climate change has different impacts on men and women and can contribute to greater gender inequality. Given women's different exposure and sensitivity to climate shocks and stressors, and entrenched gender inequalities in society such as patriarchal norms, they tend to be especially vulnerable to the negative impacts of climate change particularly in certain geographies (Lecoutere et al. 2023). For example, women's labor burden in agriculture increases relative to men's under climate extreme events, such as heat stress (Nico and Azzarri 2024; Lee et al. 2021). Women and girls also face specific climate-related risks such as an increase in violence against women and child marriage. For instance, climate-induced displacement can force families into informal settlements or refugee camps, where weak protection systems expose women to higher risks of sexual violence, exploitation, and trafficking (Care International 2020, UNEP et al. 2020). Droughts can also cause women to walk longer distances to collect water and firewood, increasing risk of violence and exhaustion and reducing access to schooling and income-generating activities (Pommells et al. 2018). Given relatively lower resilience capacities, such as less access to resources, climate information, and less decision-making authority, women face greater challenges in adapting effectively to the climate disturbances (Ngigi et al. 2017, FAO 2024, Bryan et al. 2024). Gender-blind climate actions have been found to further exacerbate these inequities (Bryan et al. 2024, UNFCCC 2022).

It has been well-established that climate change is affecting food security and nutrition outcomes, and that different climate policies and investments can reduce or exacerbate these impacts. Similarly, different food security and nutrition strategies, such as food-based dietary guidelines, can directly affect changes in future greenhouse gas (GHG) emissions and climate change. These relationships are, moreover, gendered in that women often first reduce food consumption in response to adverse climate shocks and that targeted nutrition support to women, for example, during pregnancy can reduce some of the most negative impacts (Shankar et al. 2023; Bryan et al. 2024; Fanzo et al. 2018).

The Government of Kenya has recognized the challenges climate change is imposing on the country's development and has developed a law and a series of policies to fight the climate crisis. These include the National Climate Change Response Strategy - NCCRS (GoK 2010), the Climate Change Act (Republic of Kenya 2016), National Climate Change Action Plan (NCCAP) 2023-2027 (GoK 2023), Kenya Energy Transition & Investment Plan 2023-2050 (Ministry of Energy & Petroleum 2023), Nationally Determined Contribution – NDC (Ministry of Environment and Forestry – 2020), National Adaptation Plan (NAP) – 2015-2030 (Republic of Kenya, 2016a), Kenya Climate Smart Agriculture Strategy 2017-2026 (GoK 2017) and Climate Change sub-national policies. The 2016 Climate Change Act created the National Climate

Change Council and also established a Climate Change Fund to serve as the financing mechanism for priority climate change actions and interventions approved by the Council. While most policies focus on climate change impacts and solutions in agricultural production systems, a growing number of policies recognize the importance of addressing gender inequalities and nutrition insecurity.

Kenya's climate change policy landscape is shaped by the country's decentralized governance system established by the 2010 Constitution. National ministries provide guidance for the development of sectoral plans that counties are expected to adapt to local needs. As such, multiple stakeholders at both national and local levels are expected to be actively involved in the design and implementation of climate adaptation and mitigation actions under the coordination of the Climate Change Directorate (CCD) of the Ministry of the Environment.

Given the complexity of the policy and institutional landscape of climate action in agri-food systems in Kenya, it is challenging to discern the key actors that shape how policies are designed, implemented and monitored. The main objective of the stakeholder mapping exercise was to identify key actors engaging in climate change adaptation and monitoring, to develop insights on how to strengthen the implementation of climate policies, monitor outcomes, and evaluate entry points for integrating gender and nutrition in policy processes. This research was carried out as part of the Gender, Climate Change and Nutrition Integration Initiative (GCAN) that aims at enhancing understanding between climate, gender and nutrition toward increased resilience, women's empowerment and nutrition outcomes. The study was implemented both at the national level and, given Kenya's decentralized system, also at the county level with participants from four counties.

2. Methodology

Three basic types of resources are central to the political economy of inter-organizational networks: authority, information and money (Aldrich 1972; Benson 1975). Authority refers to the legitimacy of an actor's performance with rights and responsibilities while dealing with a policy problem. Money is needed to run the programs required for the policy to succeed. Authority and money are related since authority to conduct a programmatic activity generally implies a claim upon money and other resources, including information. Information is a critical resource that ties organizations together, and control over information often translates into power and money. These resources are often too complex for a single organization to access. Some organizations, especially government agencies or powerful donors, have direct access to them, while others in the policy network, like private firms and NGOs, access them via those who possess the resources. While substantial inequality may exist among these actors considering viable access to external resources, factors like relative positionality, asymmetric connections with other actors, and the ability to form sub-network coalitions allow the otherwise weaker actors to balance power within the network.

Data on the climate change institutional landscape in Kenya were collected through participatory workshops using the Net-Map approach (Schiffer and Hauck 2010). Net-Map is a tool for collecting social network data that can be used for research or to support organizational planning (Schiffer 2007). It is a facilitation or interview technique that helps people understand, visualize, discuss, and improve situations in which many different actors influence outcomes. The Net-Map method includes the creation of social actor maps and their linkages to develop a strategic approach to networking activities. Importantly, Net-Map is a tool to explore how things are actually done, rather than reflecting structures of formal policy documents (Bryan et al. 2020).

The workshops were attended by experts on climate change, gender and nutrition from government agencies, NGOs, academia, and the private sector, operating at the national and county levels (see Appendix 1 for details). Initially, the overall guiding question that framed the workshops was: Who is involved in monitoring climate policies, investments, and actions at the national [or county] level? However, participants mentioned that there was no functioning system to monitor climate policies and actions. As a result, the Net-Map developed by the participants also included stakeholders who were active in the design and implementation of climate action.

Actors named by workshop participants were placed on color-coded post-it notes, differentiating government agencies, private sector, donors, UN agencies, local NGOs, international NGOs, and research institutes. As participants listed the actors, they were asked to describe their role in the institutional landscape and why they are important for monitoring climate action.

In a second step, participants were asked to draw connections between actors using four different categories of linkages: 1) authority (formal authority and informal influence), 2) financial flows, 3) information and advice, and 4) data and reporting. Formal authority was defined as any official relationship that links people based on a formal chain of command or organizational hierarchy. Informal pressure was described as the ability of an actor to influence or obstruct another actor's decisions outside official means, such as using political or social power. Financial flows were defined as exchanges of money, which may include funding or lending (such as loans or grants from a donor to an NGO or government) as well as commercial purchases or payments (as in a farmer purchasing climate-smart technology). Flows of information and advice were defined as communication of information or technical/policy advice from one actor to another on climate change related issues. Data and reporting denoted flows of data for various purposes related to monitoring the impacts of climate policies including project-level monitoring and government reporting. We divided the "information category" into two distinct components—information and advice and data and reporting—to highlight its critical role throughout all stages of the project cycle and for various purposes. While providing information and advice is essential for program design and ensuring coordinated implementation efforts, sharing data and reporting are vital for maintaining accountability and tracking results. Given the focus of the workshops on systems for monitoring and evaluation, we felt the distinction would be useful.

The different types of linkages were also color coded and connected the actors identified in step 1. Using arrows, for each of the linkages, three types of connections were noted: indegree (incoming connections), outdegree (outgoing connections) and mutual (both incoming and outgoing connections). Given the large number of actors, linkages were often drawn between clusters of actors within the same actor type. For example, participants assigned only one funding link between all donors and local NGOs, rather than distinguishing funding linkages between each donor organization and the particular local NGOs they support.

In a third step, participants revisited each of the actors they had listed in step 1 to assign a particular level of influence. Participants were asked to rate actors using a scale of 1 to 4 with one being the least influential and four the most influential. Influence was defined as the ability to strengthen/weaken monitoring efforts, carry out or hinder monitoring activities, or influence the design and implementation of monitoring systems at the national or county levels. However, during the workshop, influential scores were given to actors also involved in the design and implementation of climate action. Levels of influence were sometimes assigned to clusters of actors within the same category.

Lastly, participants were asked to reflect on the entire map to discuss the strengths and weaknesses within the landscape, major constraints to effective monitoring of climate change policies and interventions, how well actors in the landscape are coordinating on climate change monitoring, opportunities to strengthen the integration of gender and nutrition into the design and implementation of monitoring systems, and data gaps.

Following the workshop, data from the maps were inserted into excel and imported to the KUMU visualization platform (https://kumu.io) to create stakeholder maps that include the various types of actors and linkages. Influence scores were assigned to each actor. In some cases, actors were clustered together, and an overall influence score was assigned to the cluster. KUMU's social network analysis (SNA) metrics were used to identify the most connected actors within the network. Further analyses of the networks were done in R using the igraph packages.

3. Analysis of stakeholder networks

National-level Stakeholder Network

Workshop participants focused on identifying actors in the overall climate change institutional landscape, including actors involved in policy design, implementation, and research, with some participants providing insights about these actors' roles in monitoring and evaluating the impacts of climate policies and interventions. Participants listed a total of 171 organizations active in the climate action space. These included 25 donors, 52 government entities, 33 international NGOs, 13 local NGOs, 21 private sector actors, 14 research institutes (from all sectors), and 13 UN Agencies (See Appendix Table 2.1.1 for details)[1]. However, participants did not assign levels of influence or established linkages for all of these organizations.

The Net-Map in Figure 1 presents organizations with at least one type of linkage. In some cases, influential scores (and linkages) were given to a group of organizations and as a result the net-map shows the umbrella name of those organizations (e.g. UN Agencies, international organizations, donors). The full list of organizations and their influence scores can be found in Appendix 3. Each of the nodes shown in Figure 1 is sized based on the assigned level of influence—the larger the node, the more influential the actor (or cluster of actors). In cases where there were disagreements about the assigned level of influence, we noted a range of scores and assigned the average influence level when generating the maps.

[1] Participants also mentioned the National and County Integrated Monitoring and Evaluation Systems, the Kenya Integrated Agricultural Management Information System and the Agri-Nutrition Strategy which were not included in the map because they are not organizations.

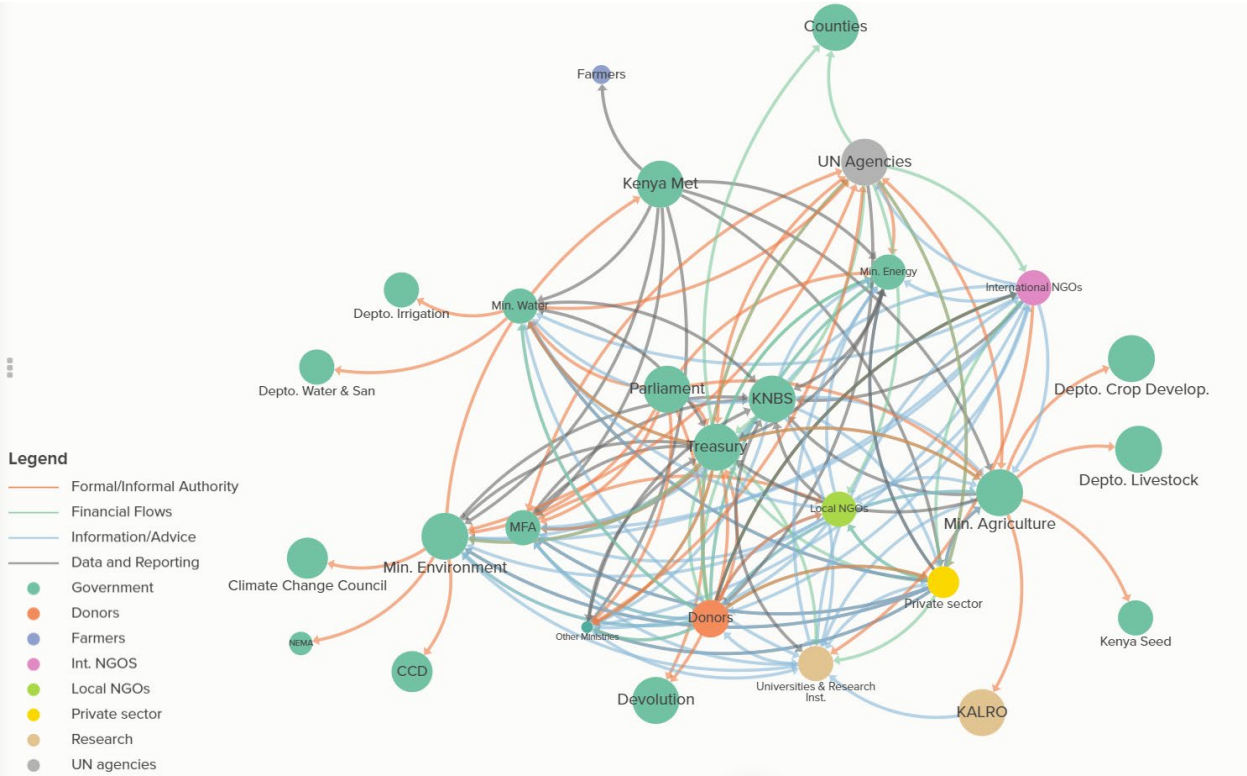

Figure 1. National-level Net-Map with linkages among actors in the climate change institutional landscape established by participants of the national level workshop
Note: The size of the circles (or nodes) represents influence level (1 to 4). Devolution refers to the Ministry of Devolution; Depto refers to Department of.
Source: Authors (visualized using Kumu).

Influential Actors

The government category had the largest number of highly influential actors (11 government actors), followed by donors (6 actors) and the private sector (3 actors). The UN Agencies cluster and the Kenya Agricultural and Livestock Research Organization (KALRO), and the media were also perceived as highly influential (score of 4).

Within the government, the Ministry of Agriculture was considered the most important actor because of its focus on climate change, food systems, and nutrition. The ministry, which has a climate change unit, developed the Kenya Climate Smart Agriculture Strategy 2017-2026 (GoK 2017). The strategy focuses on the implementation of priority adaptation and mitigation actions to enhance the country's climate resilience. It also developed the Kenya Climate Smart Agriculture Implementation Framework (GoK 2018), which provides guidance on mainstreaming climate smart agriculture. Participants agreed that strengthening nutrition intentionality would be more impactful through the Ministry of Agriculture than the Ministry of Health, as part of a food systems lens.

The National Treasury and Economic Planning was also among the most influential organizations. The Treasury has a Climate Finance and Green Economy Unit that coordinates efforts to identify, track and use climate finance to further national sustainable development goals. Additionally, the Unit has been taking a leading role in the coordination and implementation of the National Policy on Climate Finance

(The National Treasury, 2016) directives and activities in the country in collaboration with line ministries, county governments, private sector, civil society, and development partners.

Participants highlighted the role of the Ministry of Devolution in bringing the priorities of different regions to the attention of the national government, including the needs of farmers and other actors. The Council of Governors (COG), an additional highly influential partner, ensures that all county executive committee members factor climate change actions in development planning and budgeting in their departments. They are also in charge of providing leadership on the development of county climate change policies, county climate change acts, and other policy documents. However, during the workshop participants did not establish any linkages between COG and other institutions.

The Kenya National Bureau of Statistics (KNBS) was highlighted as an organization that regularly collects and compiles cross-sectoral data for the government. It was observed that while climate change is not KNBS's mandate, they develop metrics and calculate indicators that are useful for addressing climate change. The Kenya Meteorological Department (Kenya Met), the government institution in charge of providing early warning weather and climate information, received a high score, particularly for its ability to transmit data directly to farmers and other institutions.

The National Drought Management Authority (NDMA) is in charge of overall coordination over all matters related to drought risk management and focuses on the dryland areas. They also coordinate the Ending Drought Emergencies (EDE) Common Programme framework. However, participants did not establish any linkages between NDMA and other organizations.

Participants, furthermore, mentioned the role of the Parliament (score of 4) in ensuring timely submission of climate change related draft policies and bills for legislation and providing timely responses to parliamentary questions on the climate change bills.

Other actors identified as highly influential but without linkages to other actors include the Kenya Agricultural and Livestock Research Organization, the Executive Office of the President, the Ministry of the Environment and counties. All of these actors have power and mandates linked to climate change but were not seen as directly linking to other actors in the network graphic.

Within the private sector, Equity Bank was considered highly influential because of its governance and accessibility, monitoring platforms and products targeted at farmers. A high influence score was, furthermore, given to the media for its ability to reach people and communities all over the country. Citizens TV was singled out within the media because it broadcasts the Shamba Shape Up Program, which provides information to farmers.

Donors (the World Bank, IMF, BMGF, Rockefeller Foundation, Dutch SNV, USAID) received high influence scores because of the financing they provide. As a result, they are able to influence policy at both the national and county levels. However, it was noted that the influence of some donors (e.g. the World Bank and IMF) was both positive and negative (4 and -4)—while funding from these sources was considered important, the participants viewed these organizations as being too top-down and imposing.

Finally, UN agencies received a high score, possibly because several are based in Kenya and directly engage in climate change programming.

The Climate Change Directorate (CCD) under the Ministry of Environment, Climate Change and Forestry—the agency that has the mandate for coordination of climate change actions in the country—received a slightly lower score (3.5). Participants mentioned that capacity needs to be built to enable the CCD to fulfill its mandate.

Participants noted lack of coordination and oversight for duplication of efforts across ministries and projects and for poor communication between national and county level actors. The National Climate Change Council, which has the role of ensuring that climate change is mainstreamed in national and county governments and administers the Climate Change Fund, also received a rating of 3.5. Participants observed that the council had never met, and its principal role was to provide oversight and not monitor climate change actions.

International NGOs received an influence rating of 3 as a group. However, participants noted differences. For instance, one participant mentioned that the government "listens to AGRA most of all" while another noted that "World Vision is highly influential". Local NGOs also received an influence score of 3 with participants mentioning that actors at the county level have stronger ties with local (than international) NGOs.

Linkages Across Actors and Actor Groups

From a structural perspective, a useful measure of an actor's centrality is the network's 'degree centrality, ' which represents the sum of actors to which one actor is directly connected. In-degree centrality counts the direct incoming connections, a measure suggesting prestige as many others try to influence them, and out-degree centrality counts direct outgoing connections, an indication of being an influencer.

Our analysis finds that the government (especially the National Treasury) is the most central and dominant actor in Kenya's climate change landscape, especially considering its higher proportion of access to authority and finance channels (Table 1). While authority and finance linkages make government agencies the most powerful actors in the network, they also control a higher proportion of information/advice and data/reporting linkages.

Donors, a group that was also considered highly influential, had strong outdegree authority and financial flow linkages. This is not surprising given the financial flows from donors into the country to support climate action. The third type of actor with the most connections was the private sector because they provide information and advice and funding to other types of actors. This was followed by UN agencies, which as a group have both many incoming and outgoing linkages. The highly influential Ministries of Environment and Agriculture had strong in-degree information and advice linkages (from NGOs, donors, research institutes and KNBS) and outdegree formal authority within the government structure.

Table 1. Linkages among climate change actors, national level

Rank	Actor/group	Indegree	Outdegree	Total
1	Treasury	12	22	34
2	Donors	5	26	31
3	Private sector	9	18	27
4	UN Agencies	10	14	24
5	Universities & Research Inst.	14	10	24
6	Min. Environment	14	8	22
7	Min. Agriculture	14	8	22
8	International NGOs	9	12	21
9	Min. Water	14	7	21
10	KNBS	10	10	20
11	Min. Energy	14	4	18
12	Other Ministries	14	4	18
13	Ministry of Foreign Affairs (MFA)	14	4	18
14	Local NGOs	7	10	17
15	Kenya Met	1	8	9

Note: Mutual connections were included twice for the indegree actor and the outdegree actor who were part of the linkage.
Source: Authors.

Authority linkages accounted for 39 connections in the network (out of a total of 147 linkages) (Figure 2). Within the Government, a standard hierarchical authority system was acknowledged with the Treasury and Parliament having authority over the ministries, which in turn have authority over sub-ministerial level agencies. Participants did not establish authority linkages among federal and county governments but mentioned in the discussion that Parliament and the Treasury also have authority over county governments (but did not add this linkage explicitly).

The authority between Treasury, donors, and UN Agencies went both ways, with donors and UN Agencies requiring approval from the government to operate in the country and the government receiving funds from these organizations. Donors are perceived to have authority over the private sector, international NGOs, and local NGOs, possibly due to financial linkages between these entities.

The authority graph suggests several clusters of authority centered around the Treasury, Parliament, the Ministries of Agriculture and Environment, and the UN agencies. Each of these actors and actor groups' authorities is likely associated with different types of climate change activities.

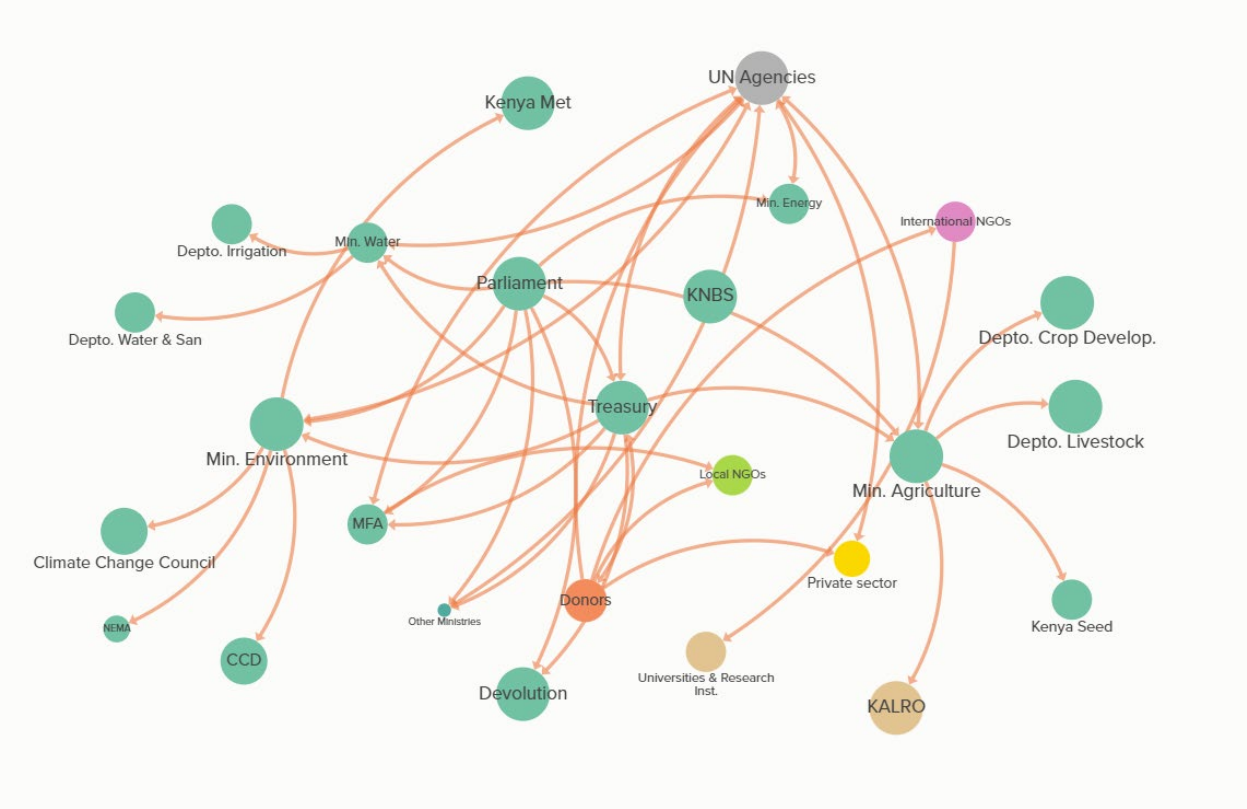

Figure 2. Authority linkages established by participants of the national level workshop
Source: Authors (visualized using Kumu).

Participants identified 28 funding linkages between clusters of actors, shown in Figure 3. Donors' authority over different types of organizations was correlated with their provision of funding to government organizations, private sector, international NGOs, and UN Agencies. The national government is funded through multiple sources. The Treasury receives funding from donors, UN Agencies, and the private sector, while ministries receive funding from the Treasury and donors. Ministries are allowed to open a special account in the Central Bank and, as a result, financial resources from donors do not need to go through the Treasury. However, the Treasury needs to approve and guarantee loans and grants. In the private sector, participants mentioned that only the foundations and not the for-profit business (such as banks) receive funding from donors and UN Agencies. In turn, the private sector was also mentioned as funders of local and international NGOs, research institutions, and the government.

Unlike the authority graph, the climate finance graph suggests centrality with the Treasury at the center of climate finance in Kenya with separate linkages to the two key government ministries, Agriculture and Environment and the UN agencies.

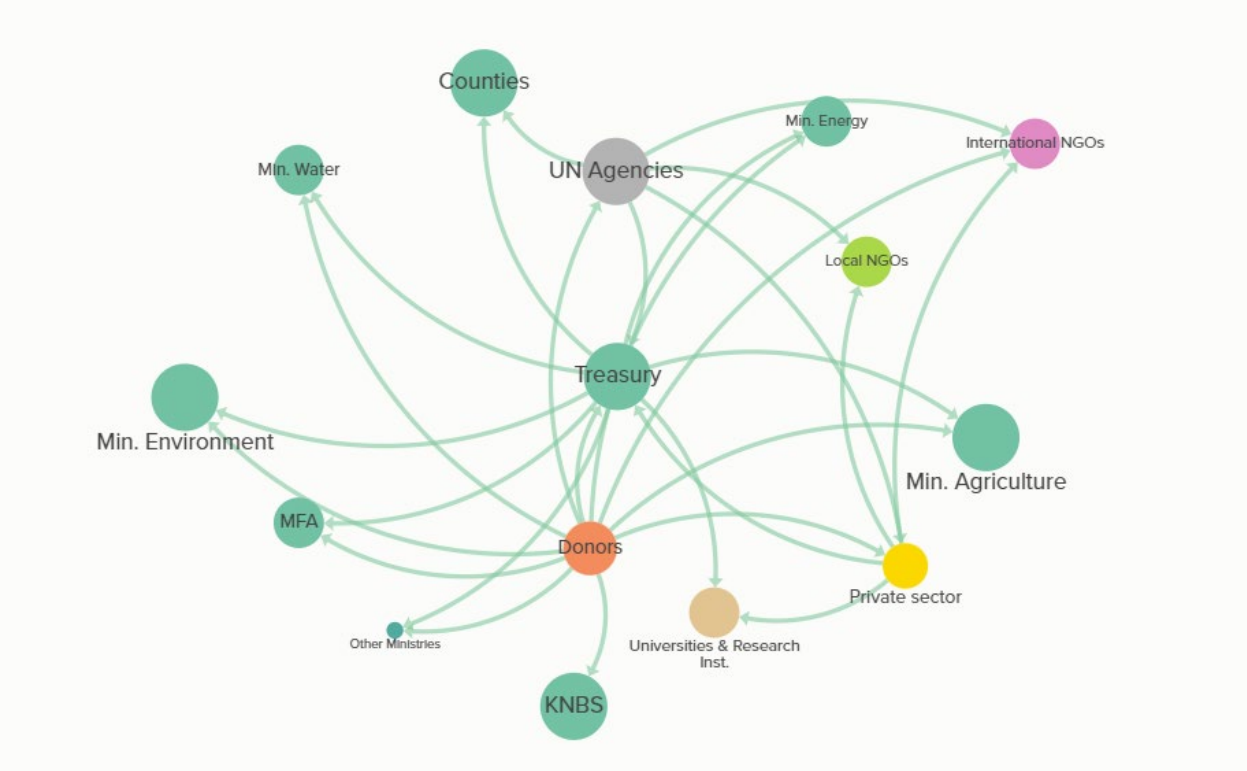

Figure 3. Financial flow linkages established by participants of the national level workshop
Source: Authors (visualized using Kumu).

Flows of information and advice were the most common type of linkage with 48 connections (Figure 4). Though participants mentioned that organizations do not coordinate well on climate action, they also noted that inter-governmental communication flows well. In general, information flows are bi-directional with some exceptions. Overall, universities and research institutes seem to have the best communication flow as most information linkages were drawn in both directions with other organization types. This suggests that feeding research results on climate action into Kenya's research system would ensure that such results are widely disseminated.

Many other key actors are largely recipients of information but do not pass the information on climate action received on to other actors. They include the Ministry of Agriculture, the Ministry of Environment, the Ministry of Water and the Ministry of Energy. As climate change affects key resources jointly and as water, energy, and food security strategies can impose additional climate risks for other sectors, it would be useful for these ministries to establish cross-sectoral information channels.

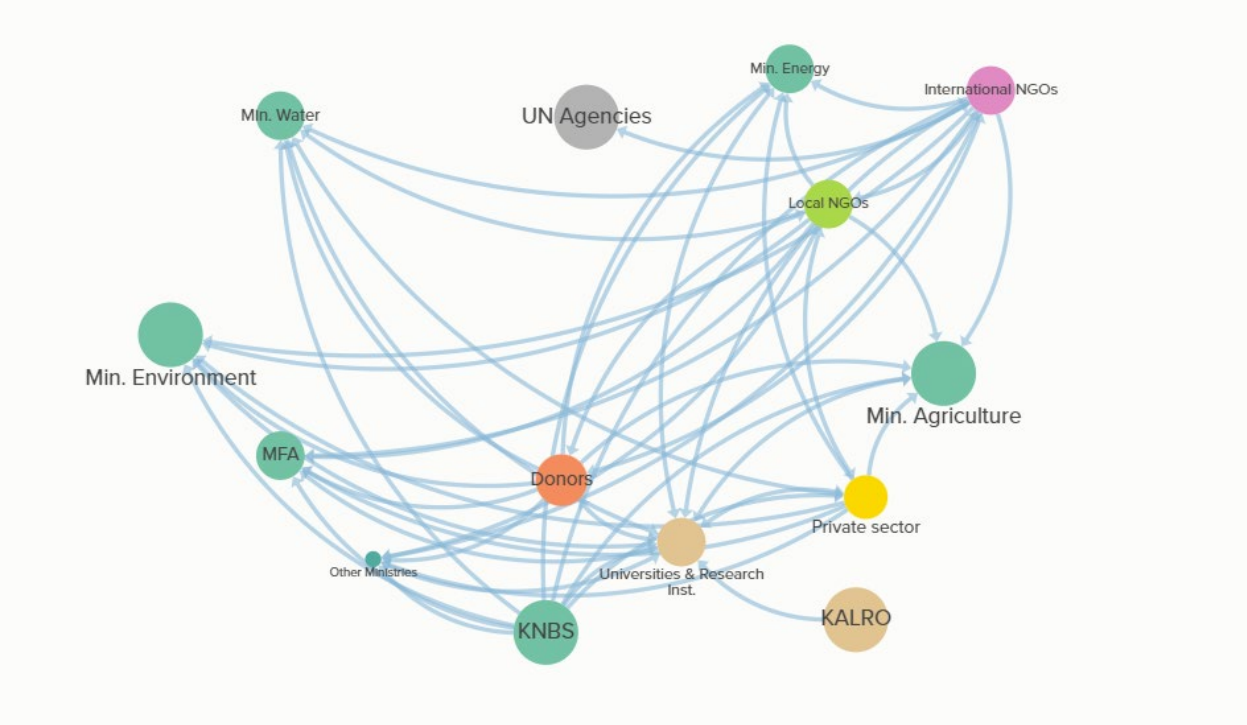

Figure 4. Information and advice linkages established by participants of the national level workshop
Source: Authors (visualized using Kumu).

Data and reporting accounted for 31 connections in the network (Figure 5). KNBS and the Treasury were at the top of the list with 10-11 linkages each. KNBS was the organization with the most indegree data linkages. Those connections were established with the same organizations that provide KNBS with information and advice. KNBS receives data from the government, NGOs, and research institutions which are compiled, analyzed, and integrated into reports. The third key data organization identified by workshop participants is Kenya Met, which provides climate information to farmers and the ministries. Kenya Met had the most outdegree linkages. Additional analyses of coalitions can be found in Appendix 2.1.

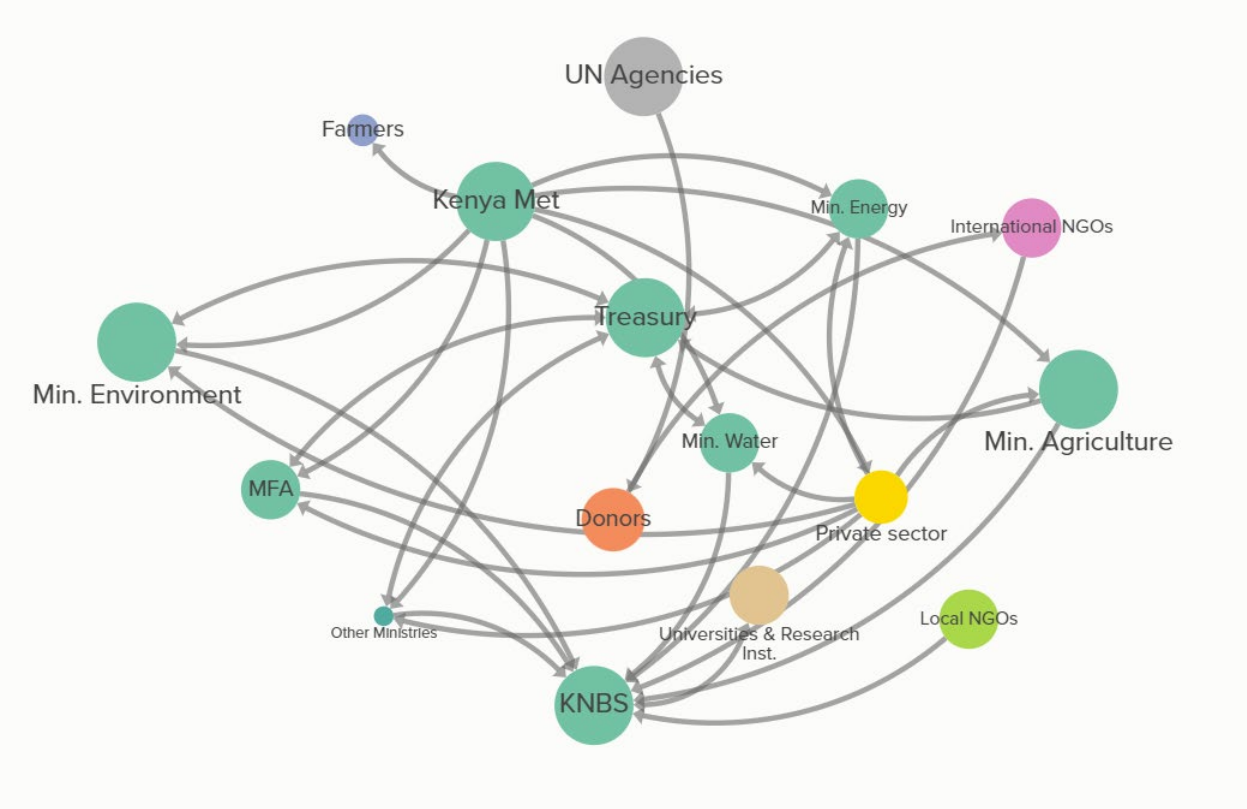

Figure 5. Data and Reporting linkages established by participants of the national level workshop
Note: MFA (Ministry of Foreign Affairs) was not given an influence level; the influence level in this figure is therefore assumed or estimated.
Source: Authors (visualized using Kumu).

County-level Stakeholder Network

The county-level workshop included representatives of four counties: Isiolo, Makueni, Murang'a and Kajiado (Map 1). These counties were selected to cover a range of agro-ecological conditions, livelihood systems, and different stages of development of local climate change policies and plans. While there are different institutions in each of the counties and different climate change and development priorities, the mixed group enabled participants to share experiences and lessons from their respective counties, as well as to learn from each other's experiences.

Map 1. Participant counties in the net-map workshop
Source: Authors.

Participants agreed that counties in Kenya are in very different stages in terms of climate change governance, policies, and investments. Across the four participating counties, Makueni has the most developed climate institutional structures, associated with a history of public participation and open government initiated by a previous governor.

There is also significant variation in how well gender issues are incorporated into counties' policies and actions. The quality of public participation, which is a main component of the devolved units, is also not uniform. For instance, a participant mentioned that in his county, women usually miss public meetings, which are often in the morning, competing with household work. While a representative of Makueni mentioned that there is legitimate public participation, other participants mentioned that events can become highly political with interested parties bringing their allies to validate their ideas. Political will is also an important factor that influences policymaking in different counties.

At the county-level workshop, one map was drawn to represent the actors and linkages found at the county level. While the participants acknowledged differences across counties in terms of government structures and organizations, most actors identified were similarly constituted in the four counties. For example, government departments at the county level generally mirror national-level ministries. However, the functions of these actors varied somewhat by county. As an example, at the time of the workshop, the mandate for climate change in Makueni was under the Departments of Lands, Urban Planning, Development, Environment and Climate Change, while in the other counties it was under the Department of Water and Environment. In addition, each county has connections with the county offices of parastatal organizations because of their provision of public services and regulatory work. Table 2 lists county-level departments in charge of climate change, gender, and nutrition as identified by workshop participants.

Table 2. County-level departments in charge of climate change, gender and nutrition

County	Climate Change	Gender	Nutrition
Makueni	Department of Lands, Urban Planning & Development, Environment & Climate Change	Department of Gender, Children, Youth, Sports & Social Services	Department of Health
Isiolo	Department of Water, Sanitation, Energy, Environment, Natural Resources	Department of Gender, Culture and Social Services	
Kajiado	Ministry of Water Services, Environment & Natural Resources	Ministry of Gender, Cooperatives, Tourism and Wildlife	
Murang'a	Department of Water, Irrigation, Environment & Natural Resources	N/A	

Source: Authors.

At the county level, workshop participants identified 144 organizations, including 7 donors, 62 government actors (including 16 parastatals), 21 international organizations, 28 local NGOs, 9 private sector actors, 12 research institutes, 4 UN Agencies and the category community-based organizations (CBOs) (Appendix Table A2.2.1). Organizations that received an influence score but with no linkages to other organizations were not included in the maps but are included in Appendix 4. When establishing linkages, participants clustered some organizations by type and influence level, resulting in a reduced network of 38 elements and 121 connections as shown in Figure 6.

Influential Actors

The county-level nodes are sized by their level of influence using the same rating scale of 1-4, with 1 being the least influential and 4 being the most influential. Twelve organizations or clusters of organizations were considered the most influential and given a score of 4, including 8 government agencies. The Council of Governors (COG) was considered highly influential as counties communicate with federal actors through this organization. The Office of the Governor (OOG) also received a high score for being the main authority in the counties while the National Treasury was influential due to its role in financial flows to the local government. The departments responsible for climate change in the counties were considered key actors in the design and implementation of climate actions.

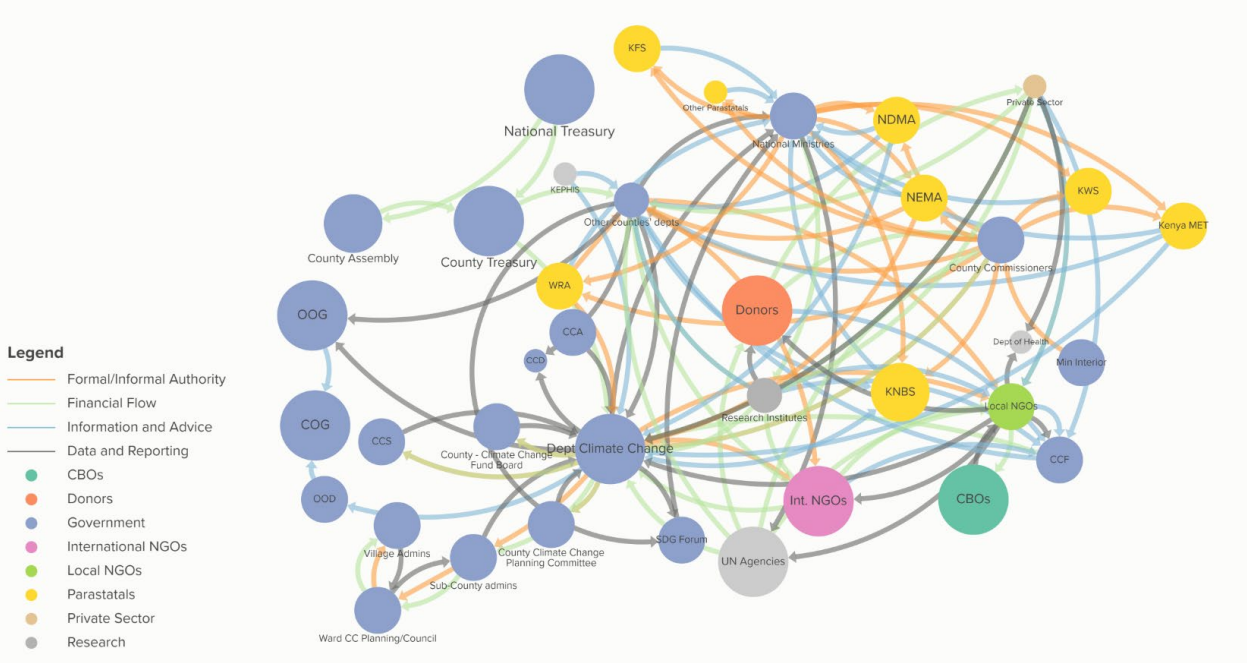

Figure 6. County-level Net-Map with linkages among actors in the climate change institutional landscape established by participants of the county level workshop

Note: In the counties' level figures, the "Dept. Climate Change" represents counties' department with climate change mandates. Department names differ across counties.

Source: Authors (visualized using Kumu).

KNBS and the County Assembly received a slightly lower score (3.5). KNBS has a department in all counties and is a great mobilizer of counties' resources especially when censuses are being conducted. Kenya Met with a rating of 3 was considered influential with farmers as they rely on forecast information to make agricultural decisions, such as when to plant. The participants perceived that the quality of information from the Kenya Met was high, and most actors had confidence in the information services provided, although some mistrust in the data prevailed. Finally, while the Ministry of Environment was highly rated, its climate change director (CCD) received a lower influence score. Participants noted that CCD prioritizes some counties over others.

The clusters of international NGOs, UN Agencies, and donors were also given influence scores of 4. International NGOs were viewed as highly influential given the support they provide to County Departments, CBOs, and other actors, such as creating awareness of climate change issues, generating research results, and providing extension services. The presence of specific international NGOs varied by county. For example, Murang'a had few international NGOs apart from Caritas. Donors and UN Agencies were seen as highly influential because they provide funding for climate change actions at the county level.

CBOs were also considered to be highly influential at the county level given that they are knowledgeable about local climate challenges and instrumental in developing local solutions to climate change. They also play an important role in promoting the use of agroecological practices and good nutrition habits. Many CBOs are women-led and focus on increasing women's climate resilience. The presence of local NGOs varied across counties; they were given an overall influence score of 3. Private sector actors received a group score of 2 with participants mentioning that they expected more investments from those actors to fight climate change and environmental degradation.

County representatives expressed larger divergence in influence scoring than national-level workshop participants, likely due to differences in the quantity and quality of different actor groups and a more unequal presence of some organizations in different counties. For instance, just like the national-level assessment, Makueni's representatives considered the NDMA highly influential while Kajiado suggested reduced influence and specifically mentioned that NDMA had no data on droughts. On the other hand, NEMA received a score of 2 from Makueni because they expected them to develop county plans and not only issue licenses. Kajiado's representative mentioned they have a great interaction with NEMA and rated them highly influential. In addition to these actors and actor groups, climate change forums are being used at county level for NGOs and government actors to meet and coordinate.

Linkages among stakeholders involved in the climate change institutional landscape in Kenya at the county level

According to the participants, the department in the counties with the climate change mandate has ties with all types of actors (Table 3), suggesting actor networks directly focused around climate change at the county level compared to the national level. The department has authority over the sub-county level organizations working on climate change and is also the recipient of funding from the national government, international organizations, and the private sector; and it receives information from the parastatal organizations.

The national ministries, the second group with the most linkages within the network, receive information from other organizations and have authority over the parastatal organizations. The county departments report to the ministries, however, no "information and advice" linkages were established between the ministries and the departments.

Table 3. Linkages among climate change actors, county level

Rank	Label	Indegree	Outdegree	Total
1	Dept Climate Change	22	15	37
2	National Ministries	11	10	21
3	Other counties' depts	14	7	21
4	Local NGOs	8	8	16
5	County Commissioners	3	11	14
6	Private Sector	3	8	11
7	Research Institutes	3	6	9
8	CCF	6	2	8
9	Int. NGOs	3	5	8
10	UN Agencies	2	5	7
11	KNBS	4	3	7
12	Donors	3	3	6
13	Sub-County admins	3	3	6
14	Ward CC Planning/Council	3	3	6

Note: Mutual connections were included twice (actor has both indegree and outdegree linkages)
Source: Authors.

Thirty-three authority linkages were established during the workshop. County commissioners had most of the linkages (11) followed by the department with the climate change mandate (9). Participants mentioned that the two levels of government (national and counties) operate in collaboration, so authority linkages were not established among national ministries and county-level departments. As Figure 7 indicates, the county commissioner is the coordinator of the semi-autonomous national parastatals at the local level. The commissioners were said to have a high level of decision-making power as they can make decisions on behalf of the governor.

For climate change-related activities, all departments report to the department with the climate change mandate which in turn reports to the CCD. At the sub-county level, the village administration is under the authority of the ward council that reports to sub-county administration.

The Water Resources Authority (WRA) and NEMA were given authority over other counties' actors because of the need to obtain WRA permits for water resources extraction and a license from NEMA for any activity likely to impact the environment. In turn, county departments have authority over international and local NGOs because these organizations are required to have a Memorandum of Understanding (MoU) to conduct activities at the county level.

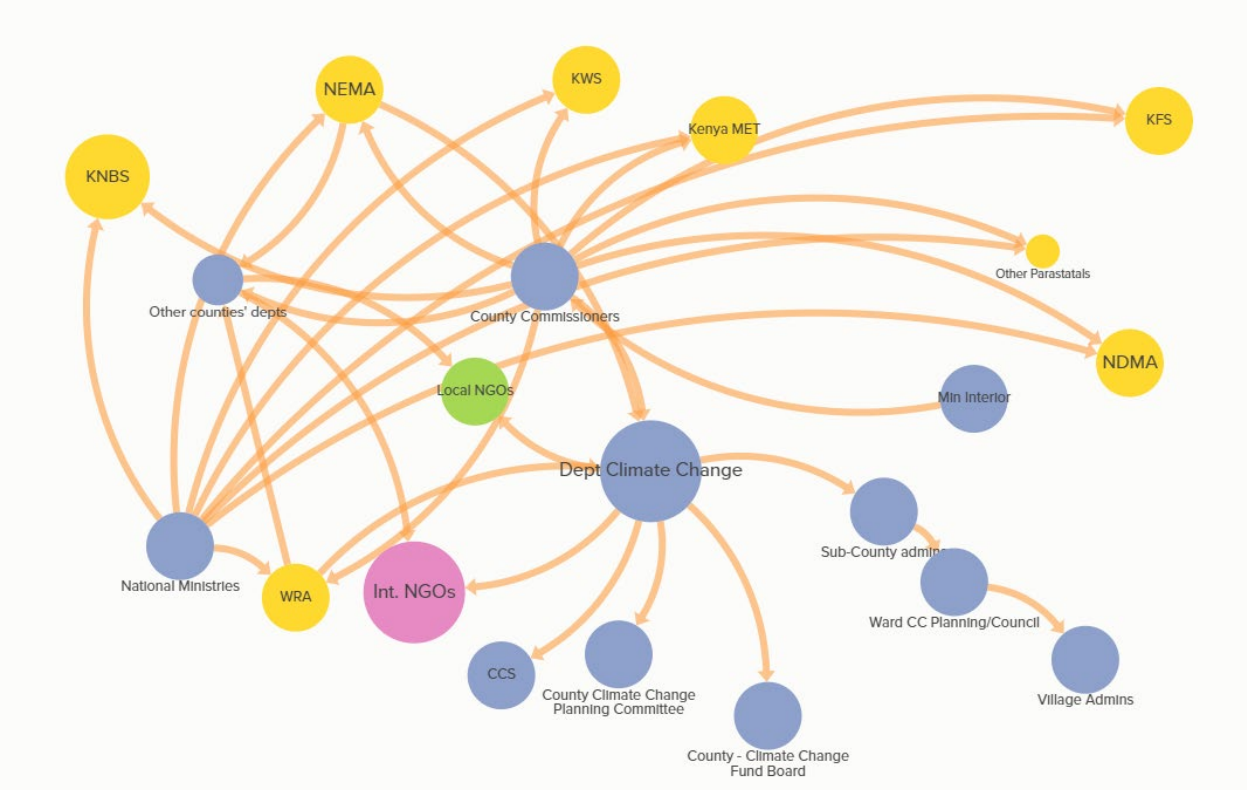

Figure 7. Authority linkages established by participants of the county level workshop
Source: Authors (visualized using Kumu).

There were 32 financial flow linkages in total (Figure 8). The funding landscape in Kenya's counties is comprised of a wide range of actors, including the national and local government, international NGOs, donors, UN Agencies, and research institutes financing climate actions. Within the government, the National Treasury funds the counties' Treasury, which in turn distributes resources to the departments. The non-governmental actors either fund counties' activities directly or through the national level

government. The department in the counties responsible for climate change had most of the financial flow linkages (11) in the network receiving funds from the government, international NGOs, private sector, research institutes, and the UN Agencies.

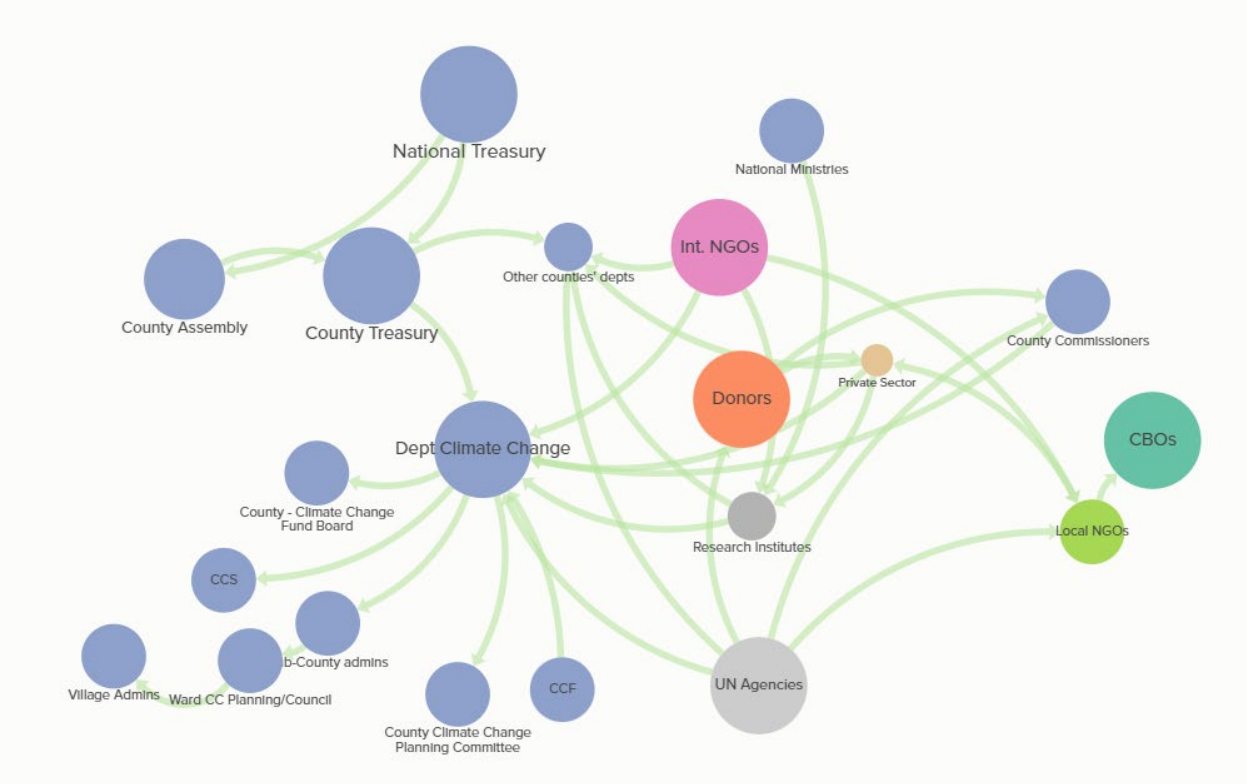

Figure 8. Financial flow linkages established by participants of the county level workshop
Source: Authors (visualized using Kumu).

Workshop participants established 28 information and advice linkages at the county level (Figure 9). Among these, parastatals and research institutes are considered important sources of information and advice to counties. Information also flows from NGOs (international and local) and research institutes to the county sectoral forum that in turn provides information to the government.

Participants mentioned that there is a lack of information exchange across counties' departments which impacts counties' ability to coordinate climate actions, reflecting a similar situation at national level. Mutual knowledge exchange was only mentioned for KNBS with the departments and the private sector with local NGOs.

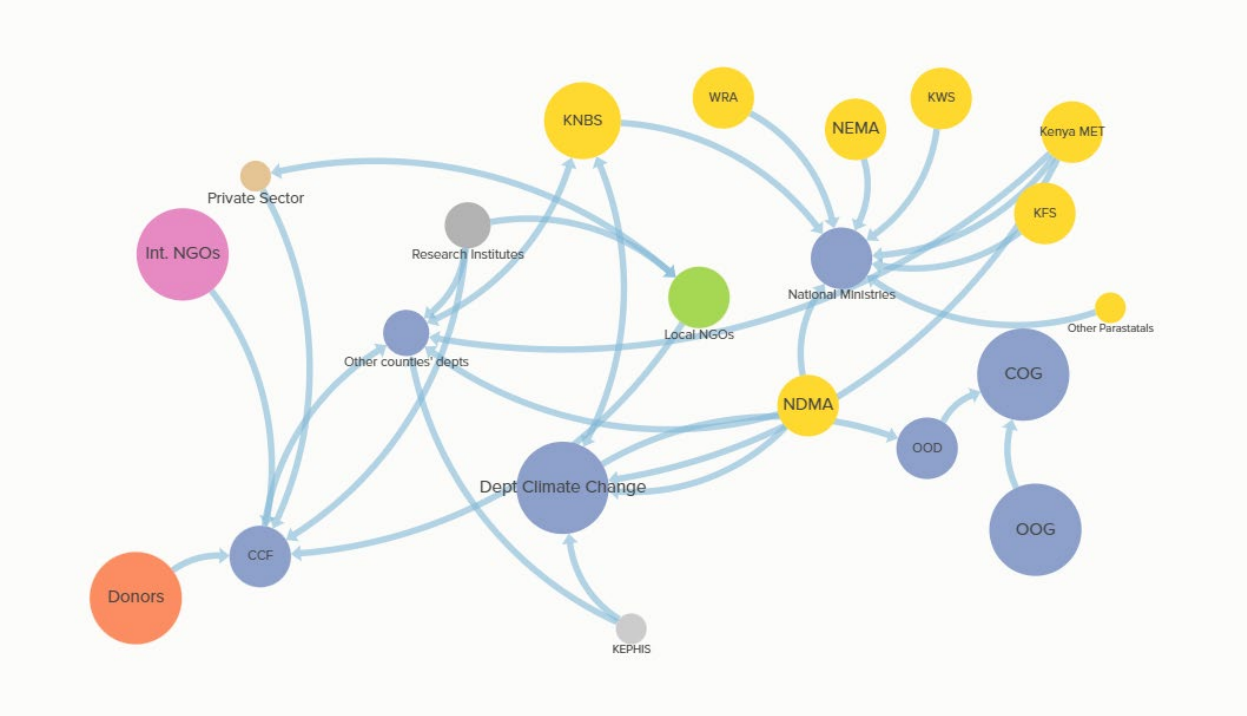

Figure 9. Information and Advice Linkages established by participants of the county level workshop
Source: Authors (visualized using Kumu).

Data and Reporting

The data and reporting category had 28 linkages (Figure 10). The workshop participants mentioned that legislation is being developed to guide the reporting on climate change and that there will be audits to establish baselines. In general, it was agreed that many counties lack the structure and capacity to develop or use available tools to monitor and evaluate their programs and that of local partners.

Community-based organizations receive funding from local NGOs, but NGO activities are not reported to the counties. On the other hand, the lack of counties' M&E systems or structures was mentioned as one of the reasons for the lack of reporting.

Analyses of subnetwork coalitions can be found in Appendix 2.2.

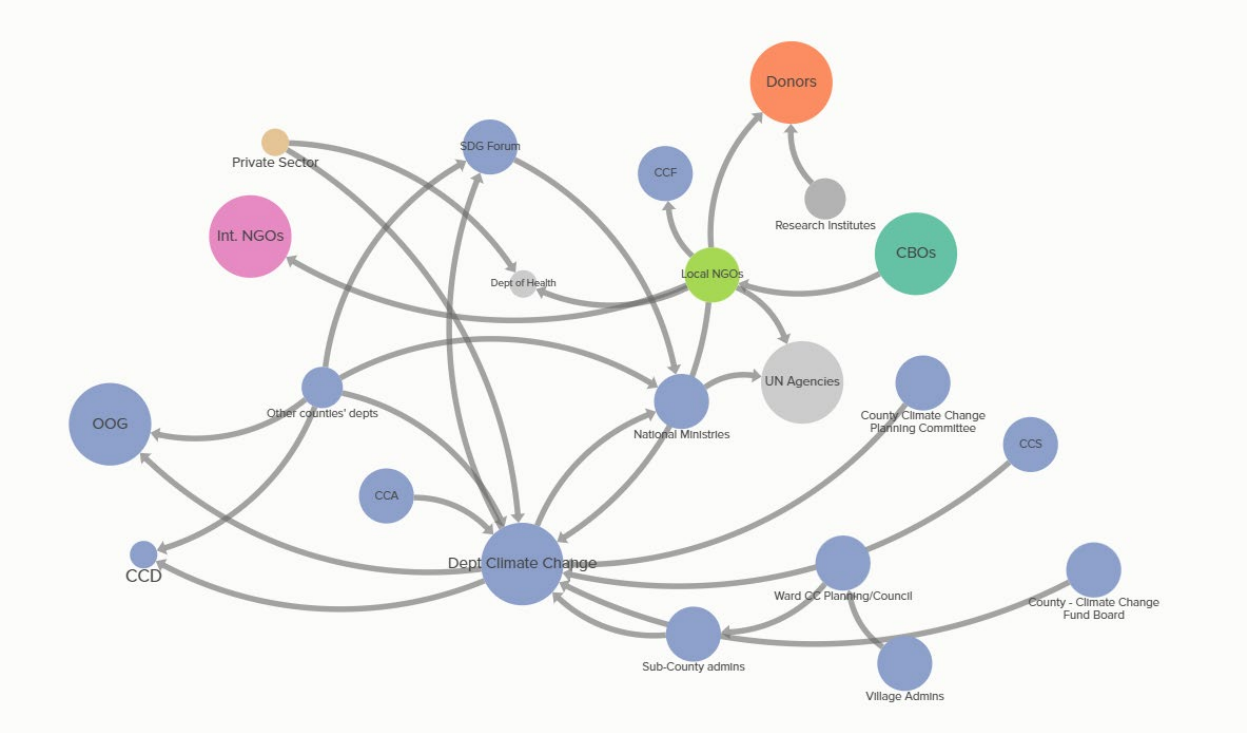

Figure 10. Data and reporting linkages established by participants of the county level workshop
Source: Authors (visualized using Kumu).

4. Discussion and Conclusions

The national and county-level Net-Map workshops provided important political economy insights into the inter-organizational relationships across government levels for climate action in Kenya. Motivated by the basic instinct to ensure the supply of resources and preserve or enhance policy-specific power, government, private, and non-governmental organizations at local, national, and transnational levels engage in complex networks. While these organizations have individual mandates, the emergent network uniquely mobilizes and implements tasks related to Kenya's climate change policy.

The Net-Map workshops were instrumental in depicting the network from the perspectives of stakeholders and experts. Together, they teased out the challenges and opportunities available to strengthen the implementation of climate policies and monitor outcomes, as well as entry points for greater integration of gender and nutrition in policy processes.

The Net-Map methodology enables researchers to shed light on the institutional landscape underpinning climate change policies in a country with multi-level decision making systems; but also has some limitations. The climate change institutional landscape in Kenya is complex with many actors with decision-making power and multiple connections. A one-day workshop was not sufficient to fully capture all the aspects of the extremely dense Kenyan stakeholder network. As a result, it is possible that some relevant actors or linkages might have been missed by workshop participants. Also, because of lack of time, participants clustered some organizations by type (e.g. donors, UN agencies) and gave influential scores to a category instead of individual actors. Clustering actors helped to understand the overall dynamics of information flow but masked relationships and influence levels of individual organizations.

Changes in key actor groups over time

The Kenya Net-Map workshops were preceded by similar data collection efforts during 2011 and 2012 that focused more explicitly on climate change adaptation (Aberman et al. 2014). Compared to the updated national level actor network that centers around the Treasury, the earlier analysis also noted that government actors have the highest power scores, suggesting a top-down structure, but did not name the Treasury. Key identified actors during 2011/12 included the Ministry of Agriculture, the Ministry of Water, Kenya Met, the Kenya Forest Service, the Ministry of Fisheries, and the Ministry of Livestock. Rather than donors or UN agencies, international and regional NGOs (Oxfam, Farm Africa, PLAN, VSF, Vi-Agroforesty) were considered to rank second in influence, while in the more recent data collection, UN agencies and some donors were ranked as more influential.

Differences in perceptions of national- and county-level participants

Several distinctions and similarities emerged when comparing the national and county-level workshops and the network results. At both workshops, the Ministry of Environment was considered highly influential. However, the Ministry's department with the mandate to coordinate climate change actions in the country, the Climate Change Directorate (CCD), was criticized for its lack of capacity in the national workshop and for not having a presence in some counties. In turn, while the Ministry of Agriculture was considered the most important actor by national-level participants, it received a slightly lower influence score (3) at county level. Importantly, the key ministries involved in climate action are not sufficiently connected but instead have developed their own actor coalitions. This might well lead to policies and strategies that negatively affect sectoral outcomes.

At the county-level, a larger number of local NGOs and community-based organizations (CBOs) were mentioned, while donors, international NGOs, UN Agencies, and private sector actors were more prominent at the national level. Participants at the national-level workshop singled out private sector actors that are more influential, while county-level participants noted an absence of private-sector influence.

In turn, county-level participants considered all donors as highly influential, while national-level participants assigned different levels of influence to particular donors. UN Agencies were considered highly influential by all participants, while international NGOs were highly influential (4) for county-level participants and somewhat influential for national-level ones (3). Local NGOs received the same influence score of 3 during both workshops.

The same number of research institutions was mentioned at both workshops. Among research organizations, KALRO was considered particularly influential. KNBS and Kenya Met were two organizations that were also considered relevant in both workshops due to their consistent and reliable information flow with the latter being particularly important to farmers.

Coordination and integration of climate change, gender and nutrition

Participants at both workshops agreed that the institutional framework for coordination needs to be strengthened and a strategy for implementation needs to be developed. National-level participants mentioned that there is plenty of funding going to climate change projects. The funding is, however, not coordinated, leading to duplication of efforts and disregard for synergies. At the county-level, participants also mentioned the lack of a proper structure to ensure coordination of efforts including

among counties' departments. Of note, the recent changes in the funding environment for work on climate change, gender, and nutrition will likely trigger changes and realignment of existing structures. These structural changes are an opportunity to more strongly link the Ministry of Agriculture and the Ministry of Environment to ensure that their respective strategies in the climate change-agri-food system space are mutually supportive.

Participants, furthermore, pointed to the need for more policy coherence and fewer inconsistencies – ministries have different mandates and often do not focus on sectoral needs and interlinkages among sectors. They emphasized that strategies need to be aligned to contribute to national goals. In order to better address trade-offs between different sectors and policies, there is a need for more research evidence including better M&E to examine the extent to which policies and interventions delivered on their objectives.

In both workshops, but especially at the county-level one, participants observed that nutrition and gender are not well integrated into climate change efforts. Existing tools and policies should be revisited to improve integration of these two core climate-linked sectors at both the national and county levels. One participant mentioned that most policies at the county level are not gender responsive but during the implementation phase organizations want to integrate gender. County-level participants also mentioned that more gender transformative approaches should be applied to programs to deal with the root causes of gender inequalities. In addition to gender, participants noted that greater attention should be paid to indigenous knowledge and vulnerability of different groups including those with disability.

Participants at the national-level workshop also pointed to ongoing efforts and opportunities to better integrate gender, climate change, and nutrition. For example, KNBS is trying to integrate gender and climate change into their agricultural surveys with support from UN Women. Climate change, gender, and nutrition indicators could be better integrated into other existing national surveys, such as the Kenya Integrated Household Survey. Key actors including CCD could request that KNBS collect data needed for climate monitoring with a gender and nutrition lens. Such requests for new data have yielded results in the past. For example, there was a public push to include an indicator on land in the Kenyan Demographic and Health Survey, which was successful.

In terms of opportunities, the Ministry of Health is updating the Kenya Nutrition Action Plan (KNAP) 2023-2027—and this presents an opportunity to integrate climate change and gender. Similarly, there is a National Biodiversity Strategy and Action draft plan 2019-2030 (MoENR 2000) and an Agroecology Strategy (MoALD 2024) that aim to integrate gender, nutrition, and climate.

Moreover, better integration of gender and nutrition could take place when existing policies come up for review, such as the Climate Change Act and the National Cooling Action Plan. Another quick win, highlighted in the county-level workshop, would be to take advantage of digital tools to engage with youth and other groups through apps to promote climate action and agriculture techniques. An example includes E-extension implemented by the Ministry of Agriculture.

International frameworks can provide both an impetus and a hindrance for greater integration of gender and nutrition in policies. For example, a participant in the national workshop noted that following the United Nations Food Systems Summit of 2021, countries are working on action plans for food system

transformation following regionally agreed goal posts. In Kenya this effort is led by the National Food System Technical Working Group. Originally the group aimed to have gender as focal area, however, gender was replaced by a "fuzzier" focus on inclusion, given disagreements among African leaders on gender integration.

Challenges in developing M&E systems

Participants of both workshops mentioned that there is currently no functioning system or strategy to monitor climate policies and actions in the country. Tools for data collection and monitoring are generally developed at very high levels (such as the UNFCCC's greenhouse gas inventory) and are not well adapted to local needs. Even at the international level, there is no clear model for monitoring adaptation and no common set of gender and nutrition indicators that could be used for this effort. Another challenge in developing M&E frameworks relates to difficulties with attribution. For example, it is hard to attribute yield outcomes to climate-related impacts and interventions vs other factors. Lack of primary and secondary data also makes impact assessment difficult. In addition, while impact assessment may be easier to implement at the project level, it becomes more challenging to aggregate and extrapolate lessons from small, micro studies to larger scales, particularly when indicators are not harmonized. Different tools are also designed at the project level but then not adopted or sustained once project funding runs out.

Participants at the national-level workshop noted that the monitoring and evaluation framework that was previously developed—the Monitoring Reporting and Verification tool of Kenya (iMRV)—was too complex and demanded a lot of time to complete. As a result, there was a high rate of non-disclosure from the counties and civil society organizations.

At the county level, participants noted that counties are supposed to have a system for monitoring: the County Integrated Monitoring and Evaluation System or CIMES. Kajiado was one of the pilot counties for this monitoring system. However, there was a gap in technical capacity and limited resources to implement the system, which led to its demise. Furthermore, local projects were not designed to report into this system. Currently many civil society organizations do not see the value or relevance of reporting or do not want to invest in monitoring efforts given the high cost of data collection. Mechanisms need to be established to guarantee that local actors disclose and report information and data. This would improve NGO and local government accountability and demonstrate the value of the contribution of civil society to address the climate challenge. Currently, the lack of reporting makes it difficult for the government to know which organizations are capable of delivering climate change programs effectively. Participants in the national workshop noted that the Treasury should play a larger role in monitoring the flow of resources and enforce reporting on how these resources are used, working in collaboration with the CCD to track implementation of governmental policies.

Importance of strengthening county capacity

One of the key messages from the county-level workshop was the need to improve counties' capacity to localize policies, implement them, and strengthen M&E systems. County-level participants noted that human resources are lacking at the county level and there tends to be a large capacity gap between the national and county levels. One participant noted that in their Water Department there were only two engineers, while another participant mentioned a lack of staff with legal expertise. While national-level participants had a high degree of confidence in the National Met services, participants at the county

level noted that there is only one Met officer per county and there is uncertainty in climate predictions and lack of trust in the Met services at the county level.

One participant suggested that cross-county visits may promote cross-county learning and capacity sharing. They suggested that visiting model counties like Makueni would help replicate the success in other counties. They also noted that there are currently few opportunities for cross-county sharing apart from the annual devolution conference which only a few county representatives can attend. Another participant suggested that in order to build capacity at the county level, climate change funds should be used to build capacity of local officials, develop curricula and materials for CBOs and communities, and provide scholarships for higher learning.

Strengthening capacity for data collection, monitoring, and evaluation

There is also a lack of capacity for data collection, monitoring, and evaluation at the county level. County participants noted that there is no secure repository for data storage and no requirement or incentive for organizations to report data to local authorities at the county level. Therefore, data are often collected and saved on personal computers and eventually lost when there is staff turnover. Participants stressed that county departments need more technical support to develop systems for data collection, management, and storage. Counties also need to develop a structure for aggregating data from communities and projects and for sharing data amongst county departments and with the national government.

KNBS is working with civil society to strengthen the quality of data collection, including providing sampling frames upon request. Data that meet their quality standards are then accepted into their repository, and they are already accepting data from some NGOs, such as GROOTS. Participants at the national level suggested that organizations should also partner with Kenya Met to ensure that the climate data they collect are accurate and relevant. At the county workshop, one participant suggested that KNBS and the County Treasury should create a dashboard or platform to capture information and data from multiple sources that would then be publicly available. Participants also suggested that each county department should have an ICT officer or accountant that is responsible for compiling and storing data. Then a climate change unit should be responsible for bringing the relevant data and research together.

Addressing political challenges

Participants in the county workshop also highlighted a series of political challenges that hinder progress on designing, implementing, and monitoring climate policies at the county level. They mentioned that it is difficult for counties to keep up with continuous policy changes and processes at the national level—as soon as an act is approved there is an amendment to the act. Thus, counties have little time to respond each time there is a policy change. Another challenge relates to the allocation of funds. Participants noted that funds are not allocated according to plans or that money may be taken from one initiative to fund another. Often these funding swings are driven by political interests, especially during campaign years. Moreover, many officials in technical departments, assemblies, and key offices (like the solicitor) are political appointees that lack capacity and technical expertise.

Addressing funding challenges

Counties need help to access global funds to mobilize resources. While funding is often given for policy development, not enough time is allowed for the development of strong climate policies. One participant mentioned being asked to design action plans for 5 years within a period of one month or less using participatory processes. This does not allow enough time for coordination across departments, accessing technical support or the establishment of proper frameworks for developing the action plans. As a result, concept papers are copied and pasted into laws and there is a lot of duplication of effort on the ground.

Overall, workshop participants highlighted numerous opportunities and approaches to streamline policy processes, promote integration of gender and nutrition, and establish mechanisms for monitoring outcomes of climate policies and interventions. In addition, county-level workshop participants highlighted many local efforts to address climate challenges with a gender and nutrition lens that are already underway. These include programs run by the agriculture department to address nutrition—such as promoting production of certain foods to improve diets, establishment of a hub to teach people about healthy diets and how to cook (Murang'a) and avoiding the use of agricultural chemicals that harm human health and pollute waterways. The government is also supporting formally-registered CBOs with training on various climate resilient strategies and these CBOs often have innovative solutions to jointly address gender, nutrition, and climate challenges. Improving coordination amongst and between ministries, county departments, NGOs, and other actors in the climate change landscape, establishing mechanisms for localization and monitoring of climate policies and interventions, and strengthening capacity for monitoring and the integration of gender and nutrition will only further increase the effectiveness of climate change actions in the country.

References

Aberman, N.-L., Birner, R., Haglund, E., Ngigi, M., Ali, S., Okoba, B., Koné, D. and Alemu, T. 2014. Understanding the policy landscape for climate change adaptation: A cross-country comparison using the Net-map method. IFPRI Discussion Paper 1408. Washington, D.C.: IFPRI. https://hdl.handle.net/10568/150518

Aldrich, H. 1972. "An organization-environment perspective on cooperation and conflict between organizations in the manpower training system." In A Nagandhi (ed.) *Conflict and Power in Complex Organizations,* Kent, Ohio: Center for Business and Economic Research, Kent State University, 11-37.

Benson, J. K. 1975. The interorganizational network as a political economy. *Administrative Science Quarterly* 20(2): 229-249.

Bryan, E., M. Alvi, S. Huyer and C. Ringler. 2024. Addressing gender inequalities and strengthening women's agency to create more climate resilient and sustainable food systems. *Global Food Security* 40. 100731. https://doi.org/10.1016/j.gfs.2023.100731

Bryan, E., F. Hagos, D.K. Mekonnen, D.A. Gemeda, and S. Yimam. 2020. The diffusion of small-scale irrigation technologies in Ethiopia: Stakeholder analysis using Net-Map. IFPRI Discussion Paper 1950. Washington, DC: IFPRI. https://doi.org/10.2499/p15738coll2.133847.

CARE International. 2020. *Evicted by Climate Change: Confronting the Gendered Impacts of Displacement*. Geneva: CARE International.

Cuni-Sanchez, A., Omeny, P., Pfeifer, M., Olaka, L., Mamo, M.B., Marchant, R. and Burgess, N.D. 2019. Climate change and pastoralists: perceptions and adaptation in montane Kenya. *Climate and Development 11*(6): 513-524.

Fanzo, J., C. Davis, R. McLaren and J. Choufani. 2018. The effect of climate change across food systems: Implications for nutrition outcomes. *Global Food Security* 18: 12-19.

FAO. 2024. The unjust climate – Measuring the impacts of climate change on rural poor, women and youth. Rome: FAO.

GoK (Government of Kenya). 2010. *National Climate Change Response Strategy (NCCRS).* Government of Kenya. Available at https://www.preventionweb.net/media/51394/download?startDownload=20250330

GoK (Government of Kenya). 2017. Kenya Climate Smart Agriculture Strategy (2017-2026). Ministry of Agriculture, Livestock and Fisheries, Republic of Kenya Available at: https://repository.kippra.or.ke/bitstream/handle/123456789/2064/Kenya-Climate-Smart-Agriculture-Strategy.pdf?sequence=1&isAllowed=y

GoK (Government of Kenya). 2018. Kenya Climate Smart Agriculture Implementation Framework 2018-2027. Ministry of Agriculture, Livestock, Fisheries and Irrigation, Government of the Republic of Kenya.

GoK (Government of Kenya). 2023. National Climate Change Action Plan (NCCAP) III 2023-2027. Toward Low Carbon Climate Resilient Development. Available at: https://faolex.fao.org/docs/pdf/ken229355.pdf

Kalungu, J.W. and Harris, D. 2013. Smallholder farmers' perception of the impacts of climate change and variability on rain-fed agricultural practices in semi-arid and sub-humid regions of Kenya. *Journal of Environment and Earth Science*, *3*(7), pp.129-140.

Kenya Red Cross. 2024. *Floods operations, 2024*. Availalbe at https://www.redcross.or.ke/floods/

Kilimo. 2019. Distribution of Farming Households by Size of Agricultural Holding (acres) and County. Agriculture Data – Kenya Population and Housing Census, 2019. KilimoSTAT

Kalele, D.N., Ogara, W.O., Oludhe, C. and Onono, J.O., 2021. Climate change impacts and relevance of smallholder farmers' response in arid and semi-arid lands in Kenya. *Scientific African*, *12*, p.e00814.

KNBS. 2024. Economic Survey 2024. Available at: https://www.knbs.or.ke/wp-content/uploads/2024/05/2024-Economic-Survey-Popular-Version.pdf

Lamanna C, Steward P, Kamau HN, Nowak A, and Rosenstock TS. 2020. Data Atlas for Climate-Smart Agriculture in Africa. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available on: content (cgiar.org)

Lecoutere, E., A. Mishra, N. Singaraju, J. Koo, C. Azzarri, N. Chanana, G. Nico, and R. Puskur. 2023. Where women in agri-food systems are at highest climate risk: a methodology for mapping climate–agriculture–gender inequality hotspots. *Front. Sustain. Food Syst*. 7:1197809. https://doi.org/10.3389/fsufs.2023.1197809

Lee, Y., B. Haile, G. Seymour, and C. Azzarri. 2021. The heat never bothered me anyway: Gender-specific response of agricultural labor to climatic shocks in Tanzania. *Applied Economic Perspectives and Policy* 43(2): 732-749. https://doi.org/10.1002/aepp.13153

Marigi, S. A. Njogu, and W. Githungo. 2016. Trends of Extreme Temperature and Rainfall Indices for Arid and Semi-Arid Lands of South Eastern Kenya. *Journal of Geoscience and Environment Protection*, **4**, 158-171. https://doi.org/10.4236/gep.2016.412012

Ministry of Energy & Petroleum. 2023. *Kenya Energy Transition & Investment Plan 2023-2050*. Available at: https://www.kenyaclimatedirectory.org/resources/66fcdef6487b8

Ministry of Environment and Forestry. 2020. *Nationally Determined Contribution (NDC).* Available at: https://unfccc.int/sites/default/files/NDC/2022-06/Kenya%27s%20First%20%20NDC%20%28updated%20version%29.pdf

MoALD (Ministry of Agriculture and Livestock Development). 2024. National Agroecology Strategy for Food System Transformation 2024-2033. Accessed at https://kilimo.go.ke/wp-

content/uploads/2024/11/National-Agroecology-Strategy-for-Food-System-Transformation-2024-2033.pdf

MoENR (Ministry of Environment and Natural Resources). 2000. A summary of the Kenya National Biodiversity Strategy and Action Plan (NBSAP). Accessed at https://faolex.fao.org/docs/pdf/ken163085.pdf

Ngigi, M.W., U. Mueller and R. Birner. 2017. Gender Differences in Climate Change Adaptation Strategies and Participation in Group-based Approaches: An Intra-household Analysis From Rural Kenya. *Ecological Economics* 138: 99-108.

Nico, and C. Azzarri. 2024. Climate change and sex-specific labor intensity: An empirical analysis in Africa. *Global Food Security*, 42: 100799. https://doi.org/10.1016/j.gfs.2024.100799

Pommells, M., Schuster-Wallace, C., Watt, S., & Mulawa, Z. 2018. Gender Violence as a Water, Sanitation, and Hygiene Risk: Uncovering Violence Against Women and Girls as It Pertains to Poor WaSH Access. *Violence Against Women*, *24*(15), 1851-1862. https://doi.org/10.1177/1077801218754410

Republic of Kenya. 2016. *The Climate Change Act No.11 of 2016*. Kenya Gazette Supplement No. 68. Special Issue. Available at ClimateChangeActNo11of2016.pdf

Republic of Kenya. 2016a. Kenya National Adaptation Plan 2015-2030. Available at: https://www4.unfccc.int/sites/NAPC/Documents%20NAP/Kenya_NAP_Final.pdf

Schiffer, E. 2007. *Net-map toolbox: Influence mapping of social networks*. Paper presented at the Documentation of Research 20/2007, Integrating Governance & Modeling Project (CPFW). Colombo, Sri Lanka: Challenge Program on Water and Food. Available at: https://cgspace.cgiar.org/items/7d1f247c-f9cd-467e-8a2f-9971b399cbb5

Schiffer, E., & Hauck, J. 2010. Net-Map: Collecting Social Network Data and Facilitating Network Learning through Participatory Influence Network Mapping. *Field Methods*, 22(3), 231-249. https://doi.org/10.1177/1525822X10374798

Silvestri, S., Bryan, E., Ringler, C., Herrero, M. and Okoba, B. 2012. Climate change perception and adaptation of agro-pastoral communities in Kenya. *Regional Environmental Change*, *12*, pp.791-802.

Shankar, K., S.A. Ali, M.L. Ruebel, S. Jessani, S.J. Borengasser, S.P. Gilley, P. Jambal, D.N. Yazza, N. Weaver, et al. 2023. Maternal nutritional status modifies heat-associated growth restriction in women with chronic malnutrition PNAS Nexus, 2 (1):pgac309, 10.1093/pnasnexus/pgac309

The National Treasury. 2016. National Policy on Climate Finance. The National Treasury, Republic of Kenya. Available at: https://faolex.fao.org/docs/pdf/ken190011.pdf

UNEP, UN Women, UNDP, and UNDPPA. 2020. *Gender, Climate and Security: Sustaining Inclusive Peace on the Frontlines of Climate Change*. Nairobi: United Nations Environment Programme. https://www.unwomen.org/en/digital-library/publications/2020/06/gender-climate-and-security

UNFCC 2022. Dimensions and examples of the gender-differentiated impacts of climate change, the role of women as agents of change and opportunities for women Synthesis report by the secretariat. https://unfccc.int/sites/default/files/resource/sbi2022_07.pdf

World Bank 2021. Kenya. Climate Risk Country Profile. Washington, DC: the World Bank Group. 15724-WB_Kenya Country Profile-WEB.pdf (worldbank.org)

World Bank. 2022. Employment in agriculture (% of total employment)(modeled ILO estimate) – Kenya. https://databank.worldbank.org/home

Appendix 1:

Seventeen participants attended the national level workshop on October 4, 2023, and 13 participants from four counties (Isiolo, Kajiado, Makueni, Murang'a) attended the county-level workshop on October 5, 2023. Organizations represented at the workshops are shown in Tables 1 and 2 below.

Table A1.1. National Workshop, October 4, 2023

Organization	Type
Adaptation Consortium	NGO
Kenya Meteorological Department	Government
Ministry Arid and Semi Arid Lands	Government
World Food Programme	UN Agency
Council of Governors	Government
Children's Investment Fund Foundation (CIFF)	NGO
Office of the President.	Government
VI-Agroforestry	Development Organization
Tegemeo Institute	Research Institute
Kenya Private Sector Alliance	Private
GROOTS Kenya	NGO
Africa Youth Commission	NGO
WFP Kenya	UN Agency
FAO	UN Agency

Table A1.2. County-level Workshop, October 5, 2023

Organization	Type
Kajiado County, Environment Ministry	Government
Murang'a County	Government
Makueni County	Government
Environment and Natural Resources, Kajiado County	Government
Global Open Data for Agriculture and Nutrition	NGO
Department of gender, children, culture and social services, Makueni	Government
Isiolo County	Government
Food and Agriculture Organization of the United Nations	UN Agency
Ilaramatak Community Concerns, Kajiado	NGO

Appendix 2.1

Table A2.1.1 Distribution of actor type

Actor Type	Frequency	%
Government	52	30
International NGOs	33	19
Donors	25	15
Private	21	12
Research	14	8
Local NGOs	13	8
UN agencies	13	8
Total	**171**	**100**

Note: All research institutes, including government, private, and non-profit-actors, have been collapsed into the research category.
Source: Authors.

Subnetwork Coalition at the National Level

Overall, the national-level network has low clustering, measured at about 0.10. We found four modules (with relatively more apparent boundaries) that can be interpreted as actor coalitions in a public policy setup (Table A2.1.2 and Figure A2.1.1).[2] They can also be interpreted as mechanisms for groups of actors to negotiate with other actors, including the government, and wield influence in the climate change policy space. Rather than mere fragmentation or fracture in the network, clustering may also indicate differentiated functions or task groups, which play critical roles in maximizing the overall outcome of the policy network.

The first coalition evolves around the Treasury and includes (but is not limited to) the Ministry of Water, the Kenyan Parliament, and the counties. The second coalition includes civil society and external actors, like the UN agencies, research institutes, and private sector actors that flock around donors and international NGOs. The third and fourth coalitions are around the Ministry of Agriculture and Environment, respectively. This further confirms the lack of linkages between key ministries that ideally should work together to address climate change, in particular the ministries of Agriculture and Environment, but also Water and Energy.

[2] We used 100% resolution for clustering within igraph's cluster_leiden method in R. Higher resolutions lead to smaller communities, while lower resolutions lead to fewer larger communities. Alternative resolution or other methods, such as igraph's multilevel_community, would produce a different number and sizes of clusters.

Table A2.1.2 Network Coalitions at the National Level

Coalition_1	Coalition_2	Coalition_3	Coalition_4
Treasury	MFA	Min. Agriculture	Kenya Met
Parliament	Donors	KALRO	Min. Environment
Min. Water	UN	Depto. Crop Develop.	Farmers
Other Ministries	INGOs	Depto. Livestock	CCD
Min. Devolution	Private Sector	Kenya Seed	Climate Change Council
Depto. Irrigation	Research		NEMA
Depto. Water & San	KNBS		
Counties	NGOs		
	Min. Energy		

Source: Authors (using R).

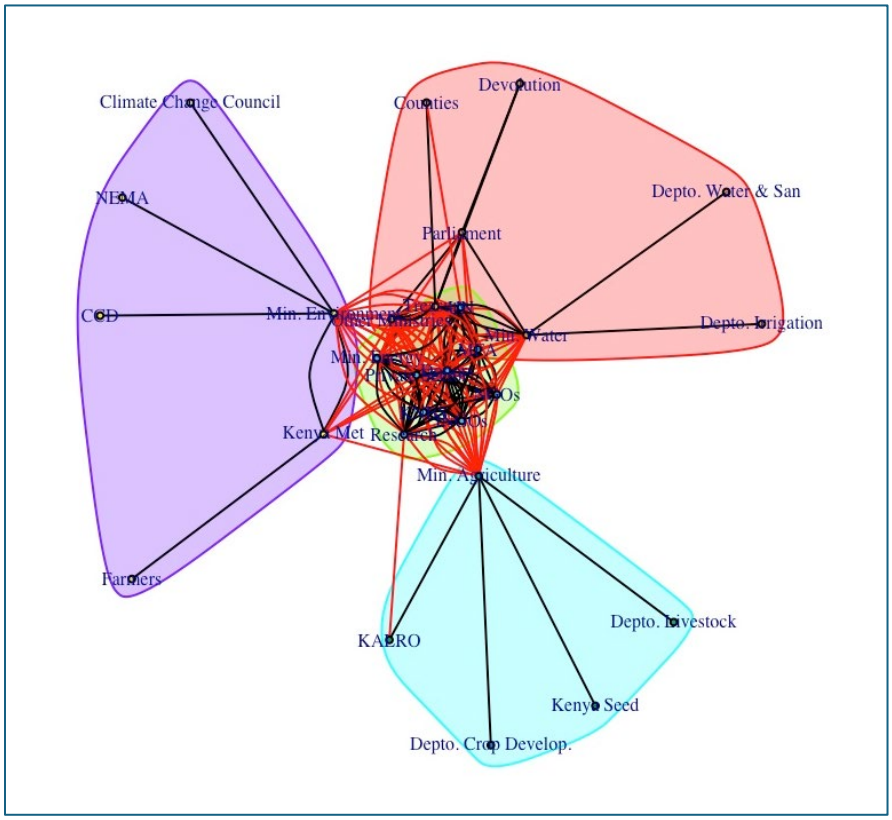

Figure A2.1.1. Network Coalitions at the National Level
Note: Depto. refers to department; Devolution refers to the Ministry of Devolution.
Source: Authors (using R).

Appendix 2.2

Table A2.2.1 Actors involved in county-level climate action in Kenya

Actor Type	Number	%
Government	62	43
Local NGOs	28	19
International NGOs	21	15
Research	12	8
Private	9	6
Donors	7	5
UN agencies	4	3
CBOs	1	1
Total	**144**	**100**

Source: Authors.

Sub-network coalitions

Overall, the county-level network has a moderate level of clustering, measured at 0.36 and four coalitions.[3] Three of these coalitions are organized around government actors negotiating with other actors in implementing climate change policy at the county level. Unlike the national network, local NGOs seem to be active in the county coalition space.

As shown in Table A2.2.2 And Figure A2.2.1, the first coalition revolves around local NGOs, and includes the CBOs, the private sector, and the UN agencies. The second coalition includes national and local climate change authorities. The third coalition represents a triangle between the National Treasury, the County Treasury, and the County Assembly. Finally, the fourth coalition includes all the national ministries, which, together with the County Commissioners, brings together a host of actors such as the Ministry of Interior, Parastatals, Kenya Met, and NEMA, among others.

The coalition analysis identifies groups of actors that can be reached by engaging within these coalitions as well as actors and actor groups that might well be missed by focusing on actors within one of these coalitions.

[3] We used medium (.5) resolution for clustering within igraph's cluster_leiden method in R. alternative resolution or other methods such as igraph's multilevel.community produces different number of clusters.

Table A2.2.2. Actor Coalitions in Kenya County Network

SN	Coalition_1	Coalition_2	Coalition_3	Coalition_4
1	CBOs	CCA	County Assembly	County Commissioners
2	CCF	CCD	County Treasury	HDMA
3	Dept of Health	CCS	National Treasury	Kenya Met
4	Donors	COG		KFS
5	Int. NGOs	County - Climate Change Fund Board		KNBS
6	Local NGOs	County Climate Change Planning Committee		KWS
7	Other counties' depts	Dept Climate Change		Min Interior
8	Private Sector	KEPHIS		National Ministries
9	Research Institutes	OOD		NEMA
10	UN Agencies	OOG		Other Parastatals
11		Sub-County admins		SDG Forum
12		Village Admins		WRA
13		Ward CC Planning/Council		

Source: Authors (using R).

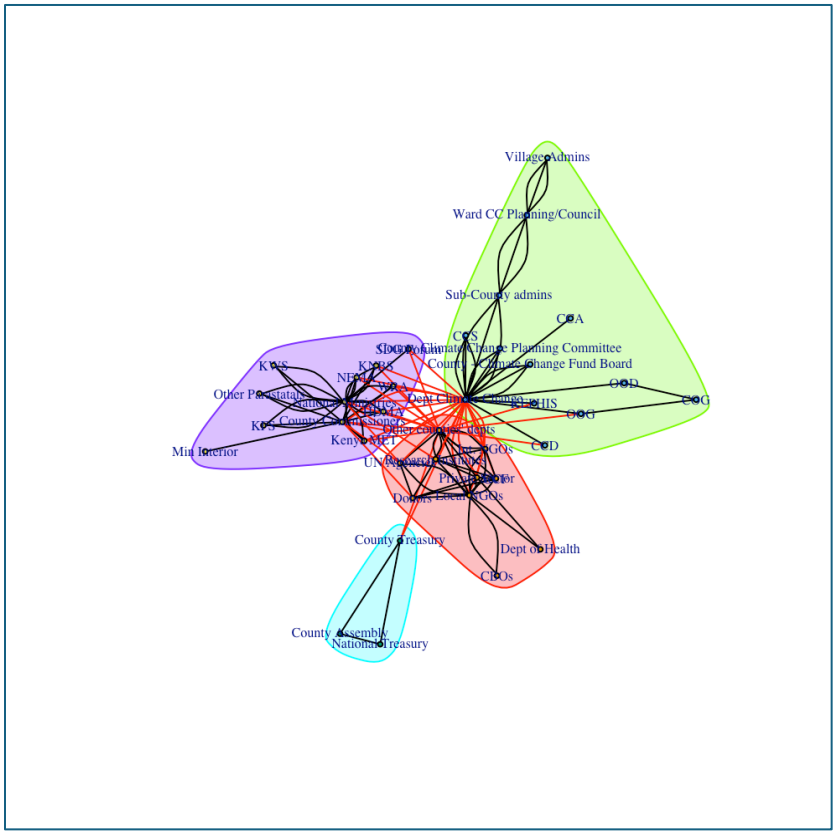

Figure A2.2.1. Coalition Pattern in the Kenya County Network
Source: Authors (using R).

Appendix 3 – Complete list of organizations mentioned at the national-level workshops

Table A3.1 National level actors with influence scores

Donors – Acronym	Full name	Influence score
CIFF	Children's Investment Fund Foundation	2
DANIDA	Denmark's Development Cooperation	3
Dutch SNV	Netherlands Development Organization	4
EU	European Union	3.5
FCDO	Foreign, Commonwealth & Development Office - UK	3
BMGF	Gates Foundation	4
GIZ/BMZ	Deutsche Gesellschaft für Internationale Zusammenarbeit/ German Federal Ministry for Economic Cooperation and Development	3
Global Affairs Canada	Global Affairs Canada	3
IMF	International Monetary Fund	4
KOICA	Korean International Cooperation Agency	2
NORAD	Norwegian Development Aid	2.5
Rockfeller Foundation	Rockfeller Foundation	4
Safaricom Foundation	Safaricom Foundation	2.5
SIDA	Swedish International Development Cooperation Agency	3
USAID	United States Agency for International Development	4
World Bank	World Bank	4

Government - Acronym	Full name	Influence score
COG	Council of Governors	4
President	Executive Office of the President	4
Kenya Met	Kenya Metereological Department	4
KNBS	Kenya National Bureau of Statistics	4
KEPHIS	Kenya Plant Health Inspectorate Service	1
Kenya Seed	Kenya Seed Company	3
Min. Agriculture	Ministry of Agriculture and Livestock Development	4
Min. Coop.	Ministry of Cooperatives and MSMES Development	1
Ministry of Energy	Ministry of Energy and Petroleum	3
Ministry of Environment	Ministry of Environment, Climate Change and Forestry	4
Min. Investment	Ministry of Investment, Trade and Industry	1
Min. Mining	Ministry of Mining, Blue Economy and Maritime Affairs	1
Ministry of Water	Ministry of Water, Sanitation and Irrigation	3
Climate Change Council	National Climate Change Council	3.5
NDMA	National Drought Management Authority	4
NEMA	National Environment Management Authority	2
Parliament	Parliament of Kenya	4

Government - Acronym	Full name	Influence score
Depto. Crop Develop.	State Department for Crop Development	4
Depto. Livestock	State Department for Livestock	4
CCD	State Department of Climate Change / Climate Change Directorate	3.5
Devolution	State Department of Devolution	4
Dept. Irrigation	State Department of Irrigation	3
Dept. Water & San	State Department of Water & Sanitation	3
Treasury	The National Treasury and Economic Planning	4

International NGOs - Acronyms	Full name	Influence score
ActionAid	ActionAid	3
AFSA	Alliance for Food Soverignty in Africa	3
AGRA	AGRA Kenya	3
AMREF	AMREF Health Africa	3
AU	African Union	3
Care	Care International	3
Caritas	Caritas	3
Clean Cooking Alliance	Clean Cooking Alliance	3
CRS	Catholic Relief Services	3
FEWSNET	Famine Early Warning Systems Network	3
GAIN	Global Alliance for Improved Nutrition	3
Greenpeace	Greenpeace	3
HIVOS	HIVOS	3
ICPAC	IGAD Climate Prediction and Applications Centre	3
IGAD	Intergovernmental Authority on Development	3
IIED	International Institute for Environment and Development	3
IRC	International Rescue Committee	3
LWF	Lutheran World Federation	3
Mercy Corps	Mercy Corps	3
Nutrition International	Nutrition International	3
One Acre Fund	One Acre Fund	3
One CGIAR	One CGIAR	3
RCMRD	Regional Centre for Mapping of Resources for Development	3
Refugee Agencies	Refugee Agencies	3
RTI	RTI International	3
Save the Children	Save the Children	3
SEI	Stockholm Environment Institute	3
SFS	School for Field Studies	3
SLU	Swedish University of Agricultural Sciences	3
Techno Serve	Tecno Serve	3
VI Agroforestry	VI - Agroforestry	3

International NGOs - Acronyms	Full name	Influence score
World Vision	World Vision	3
WRI	World Resources Institute	3

Local NGOs - Acronym	Full name	Influence score
ADS	Anglican Development Services	3
GROOTS	GROOTS Kenya	3
KFA	Kenya Farmers Association	3
Farmer organizations	Farmer organizations	3
PELUM Kenya	Participatory Ecological Land Use Management Association	3
CGA	Cereal Growers Association	3
SACDEP	SACDEP	3
Seed Savers	Seed Savers Network - Kenya	3
Takaful	Takaful Insurance	3
PACIDA	Pastoralist Community Initiative and Development Assistance	3
GiveDirectly	GiveDirectly	3
ADA	ADA Consortium	3
EAFFU	Eastern Africa Farmers Federation	3

Private sector Acronym/short name	Full name	Influence score
Pula	Pula	1
Investors	Investors	2
Bitdco	Bidco Africa Limited	2
Chandari Foundation	Chandari Foundation	2
Kickstart	KickStart International	2
Co-op Bank	Co-operative Bank of Kenya	3
FSD	Financial Sector Deepening Kenya	3
KCB	KCB Bank Kenya Limited	3
KEPSA	Kenya Private Sector Alliance	3
Media	Media	4
Citizen TV	Shamba Shake up Programme	4
Equity Bank	Equity Bank	4
AMACO	Africa Merchant Assurance Company Ltd	1.5
KCIC	Kenya Climate Innovation Center	2.5
Safaricom	Safaricom	3.5

Universities and Research Inst. Acronym	Full name	Influence score
Embu UMN	Embu UMN	2
ITC	International Trade Centre	2

Universities and Research Inst. Acronym	Full name	Influence score
SEKU	South Eastern Kenya University	2
Egerton University	Egerton University	3
JKU	Jomo Kenyatta University of Agriculture and Technology	3
KU	Kenyaata University	3
Strathmore	Strathmore University	3
Tegemeo	Tegemeo Institute of Agricultural Policy and Development	3
UONBI	Universtity of Nairobi	3
KIPRA	The Kenya Institute for Public Policy Research and Analysis	3
KALRO	Kenya Agricultural and Livestock Research Organization	4
KIRDI	Kenya Industrial Research & Development Institute	2.5

UN Agencies acronym	Full Name	Influence score
UN Resident Coordinator Office	UN Resident Coordinator Office	4
UNDP	United Nations Development Programme	4
UN Women	UN Women	4
UNEP	United Nations Environment Programme	4
FAO	Food and Agriculture Organization	4
WFP	World Food Programme	4
UNICEF	United Nations Children's Fund	4
UNFPA	United Nations Population Fund	4
OCHA	Coordination of Humanitarian Affairs	4
IOM	UN International Organization for Migration	4
WMO	World Meterological Organization	4
IFAD	International Fund for Agricultural Development	4
UNIDO	UN Industrial Development Organization	4

Table A3.2 Organizations mentioned at the national level workshop that did not receive an influence score

Acronym	Type
African Development Bank Group (AFDB)	Donors
IKEA Foundation	Donors
Bezos Earth Fund	Donors
Global Adaptation Fund	Donors
Swedish Embassy	Donors
Japan International Cooperation Agency (JICA)	Donors
Mastercard Foundation	Donors
Global Center on Adaptation	Donors
Open Society Foundation	Donors
National Irrigation Authority	Government
State Department of Blue Economy	Government
Ministry of Lands, Public Works, Housing and Urban Development	Government
Ministry of East African Community (EAC), the Arid and Semi-arid Lands (ASALs) and Regional Development	Government
State Department for Public Health and Professional Standards	Government
Department of ASALs & Regional Development	Government
Ministry of Health	Government
Ministry of Public Service, Gender and Affirmative Action	Government
Ministry of Foreign and Disapora Affairs	Government
Micro and Small Enterprises Authority	Government
Kenya Forest Service	Government
Kenya Water Towers Agency	Government
Waste Management - NEMA	Government
Water Resources Authority	Government
Monitoring and Evaluation Directorate	Government
Ewasa Ngiro South Development Authority	Government
Ewasa Ng'iro North River Basin Development Authority	Government
Central Bank of Kenya	Government
Tana and Athi Rivers Development Authority	Government
Coastal Development Authority	Government
Agriculture and Food Authority	Government
Agricultural Finance Corporation	Government
Water Resource Authority	Government
Water Towers Agency	Government
National Water Harvesting & Storage Authority	Government
Kenya Fish Marketing Authority	Government

Acronym	Type
Rural Electrification and Renewable Energy Corporation	Government
Directorate of Resource Survey and Remote Sensing	Government
Kenya Marine and Fisheries Research Institute	Research
Kenya Forestry Research Institute (KEFRI)	Research
Kenya National Chamber of Commerce	Private sector
Twiga	Private sector
Green Climate Fund	Private sector
Climate Asset Management	Private sector
Biocarbon Fund	Private sector
Global EverGreening Alliance	Private sector

Appendix 4

Table A4.1 Complete list of organizations mentioned at the county-level workshops

Donors – Acronym	Full name	Influence score
DANIDA	Denmark's Development Cooperation	4
GIZ	German Corporation for International Cooperation	4
JICA	Japan International Cooperation Agency	4
KOICA	Koica International Cooperation Agency	4
SIDA	Swedish International Development Cooperation	4
USAID	US Agency for International Development	4
World Bank	World Bank	4

Government - Acronym	Full name	Influence score
CCA	Conservation and Utilization Authority	3.0
CCTWG	CC Technical Working Group.	4.0
CCD	Climate Change Directorate - Ministry of Environment	2.0
CCF	County Sectoral Forum	3.0
CCO	County Attorney Office	2.0
CCS	County Climate Change Standing	3.0
COG	Council of Governors	4.0
County - Climate Change Fund Board	County - Climate Change Fund Board	3.0
County Assembly	County Assembly	3.5
County Climate Change Planning Committee	County Climate Change Planning Committee	3.0
County Commissioners	County Commissioners	3.0
County Treasury	County Treasury	4.0
DDE	Department of Education	1.0
DDG	Department of Gender	3.0
DDH	Department of Health	1.0
DDICT	Department of ICT	1.5
DDP	Department of Public Participation	2.5

Dept Agric	Department of Agriculture, Livestock, Fisheries and Irrigation	3.0
Dept Climate Change	Counties departments with climate change mandate	4.0
Dept Economic	Department Social Economic Planning and Statistics	3.0
Dept Energy	Department of Energy	3.0
Dept Land	Department of Land and Physical Planning	1.0
Dept Mining	Department of Mining & NRM	3.0
Dept of Health	Department of Health	2.0
EREB	Easter Region Economic Block	2.0
FFCDC	Frontier County Development Council	2.0
Min Agriculture	Ministry of Agriculture and Livestock Development	3.0
Min Environment	Ministry of Environment and Forestry	4.0
Min Interior	Ministry of Interior and National Administration	3.0
Min Petroleum	Ministry of Petroleum and Mining	0.0
MME	M&E sub department	2.0
NAKAEB	Kajiado and Narok Counties Economic Block	2.0
National Ministries	Ministries	3.0
OOD	Office of Deputy	3.0
OOG	Office of the Governor	4.0
Other counties' depts	Other counties' depts	3.0
SDG Forum	SDG Forum	3.0
SEKEB	Sout East Region Economic Block	2.0
Sub-County admins	Sub-County admins	3.0
Treasury	The National Treasury and Economic Planning	4.0
Village Admins	Village Admins	3.0
Ward CC Planning/Council	Ward Climate Change Planning/Council	3.0
Water Towers	Kenya Water Towers Agency	2.0

International NGOs Acronym	**Full name**	**Influence score**
ActionAid	ActionAid	4
AGRA	AGRA Kenya	4
AMREF	AMREF Health Africa	4
Biglife	Biglife	4
Caritas	Caritas	4
ChildFund NZ	Child Fund New Zealand	4
GODAN	Global Open Data for Agriculture and Nutrition	4
Heifer International	Heifer International	4
HIVOS	HIVOS	4
Nature Conservancy	Nature Conservancy	4
Pelum Kenya	Pelum Kenya Listed as national and international NGO	4
Plan International	Plan International	4
Red Cross	American Red Cross	4
Sand Dams	Sand Dams Worldwide	4
SNV	SNV (listed as donor at the national level)	4
VSF	Veterinaires Sans Frontieres	4
VSO	Voluntary Services Overseas	4
WHH	Welt Hunger Hilfe	4

World Vision	World Vision	4
WRI	World Resources Institute	4
WWF	World Wildlife Fund	4

Local NGOs Acronym	**Full name**	**Influence score**
AICAD	African Institute for Capacity Development	3
PACDEP	Pastoralist Capacity Development Program - Isiolo ?	3
PACIDA	Pastoralist Community Initiative Development and Assistance	3
ICC	Il'laramatak Community Concerns	3
AMKA Kenya	AMKA Africa - Africa Justice Initiative - Kajiado	3
MIDP	Merti Integrated Development Programme -Isiolo	3
KENAFF	Kenya National Farmers' Federation	3
NIA	Neighbors Initiative Alliance - Kajiado	3
ADSE	Anglican Development Services Eastern - Makueni	3
WorldServe	WorldServe International	3
Dadadigital	Dadadigital	3
Pelum Kenya	Participatory Ecological Land Use Management	3
Pastoral Climate Action	Pastoral Climate Action	3
Kccwg	Kenya Climate Change Working Group	3
CGA	Cereal Growers Association	3
Team Environment Kenya	Team Environment Kenya	3
KCCWG	Kenya Climate Change Working Group	3
SORALO	South Rift Association of Landowners - Kajiado	3
Justdiggit	Justdiggit - Kajiado	3
Youth Action Rural Development (Muranga)	Youth Action Rural Development (Muranga)	3
Biovision and Biodiversity Agency (Muranga)	Biovision and Biodiversity Agency (Muranga)	3
KIPETO energy	Kipeto energy (is this really a NGO?)	3
ISFAA	Intersectoral Forum on Agrobiodiversity and Agroecology - Muranga	3
ICE Kenya	Institute for Culture and Ecology - Muranga	3
Dada Digital Initiative	Dada Digital Initiative	4

Private Sector Acronym	**Full name**	**Influence score**
Banks	Banks	2
Chamber of Commerce	Chamber of Commerce	2
Cooperative bank	Cooperative bank	2
Davis & Shirtliff	Davis & Shirtliff	2
Farmers' unions	Farmers' unions	2
Kajiado Media Association	Kajiado Media Association	2
MAGADI	MAGADI	2
SACCOS	SACCOS	2
Safaricom Foundation	Safaricom Foundation	2

Parastatals	**Full name**	**Influence score**

Acronym		
AFA	Agriculture and Food Authority	0
AFC	Agricultural Finance Corporation	2
ENNDA	Ewasa Ng'iro North River Basin Development Authority	2
ENSDA	Ewasa Ngiro South Development Authority	2.5
HDMA	National Drought Management Authority	3
IRA	Insurance Regulatory Authority	1.5
Kenya Met	Kenya Metereological Department	3
KEPHIS	Kenya Plant Health Inspectorate Services	1
KFS	Kenya Forest Service	3
KNBS	Kenya National Bureau of Statistics	3.5
KWS	Kenya Wildlife Service	3
NEMA	National Environment Management Authority (county office)	3
Net-Fund	National Environment Trust Fund	1
TARDA	Tana and Athi Rivers Development Authority	2
WRA	Water Resource Authority	3
WSTF	Water Sector Trust Fund	2

Research (governmental and non-governmental) Acronym	Full name	Influence score
Biovision	Biovision	2
Egerton University	Egerton University	2
ICRAF - CGIAR	World Agroforestry	3
ILEG - Kenya	International Law and Environment Group	1
KALRO	Kenya Agricultural and Livestock Research Organization	3
KEFRI	Kenya Forestry Research Institute	3
Lukenya University	Lukenya University	2
Machakos University	Machakos University	2
Murang'a University	Murang'a University of Technology	2
One CGIAR	One CGIAR	3
SEKU	South Eastern Kenya University	2
UONBI	University of Nairobi	2

UN Agencies Acronym	Full name	Influence score
FAO	The Food and Agriculture Organization of the UN	4
UNDP	United Nations Development Programme	4
UNICEF	United Nations Children's Fund	4
WFP	World Food Programme	4

Community-based organizations Acronym	Full name	Influence score
CBOs	Community Based Organizations (CBOs from Kajiado: Naserian Anaretoi, Friends of Kilimanjaro)	4

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