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Survey

# Dynamics of land to lake transfers in the Winam Gulf: stakeholder engagement meeting, June 2024

BGS International Geoscience Research & Development Programme / Environmental Change, Adaptations and Resilience Programme

Open Report OR/24/035





BRITISH GEOLOGICAL SURVEY

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# Dynamics of land to lake transfers in the Winam Gulf: stakeholder engagement meeting, June 2024

Humphrey, O.S., Aura, C., Ongore, C., Isaboke, J., Osano, O. and  
Watts, M.J.

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# Foreword

This report summarises the findings of the final stakeholder workshop funded by The Royal Society International Collaboration Awards 2019 grant ICA/R1/191077 carried out by the British Geological Survey (BGS) and research partners from the University of Eldoret (UoE) and Kenya Marine and Fisheries Research Institute (KMFRI) in June 2024. This workshop aimed to disseminate research findings on soil erosion and sediment source apportionment in the Winam Gulf, Kenya, discuss future opportunities and collaborations with stakeholders and use information collected from the workshop participants, obtained via a series of questions to inform future grant proposals and data distribution tools.

# Acknowledgements

This work has been conducted with the financial support of the following funders: The Royal Society International Collaboration Awards 2019 grant ICA/R1/191077 entitled 'Dynamics of environmental geochemistry and health in a lake-wide basin', BGS Centre for Environmental Geochemistry programmes, and the NERC National Capability International Geoscience programme entitled 'Geoscience to tackle global environmental challenges' (NE/X006255/1).

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# Summary

This report describes a stakeholder engagement workshop carried out by the British Geological Survey (BGS) co-funded by a Royal Society International Collaboration Grant (ICAR1\191077 entitled 'Dynamics of Environmental Geochemistry and Health in a Lake-wide Basin') and a NERC NC-International grant (NE/X006255/1, entitled 'Geoscience to tackle global environmental challenges') with research partners from the University of Eldoret and Kenya Marine and Fisheries Research Institute as hosts in June 2024.

This workshop was a follow-up to the first in-person stakeholder workshop in December 2023 that encompassed a broad spectrum of decision-makers, regulatory authorities, academia, government, industry and community representatives for land and lake management in the Lake Victoria catchment. This workshop developed further the goal from this group to establish a forum to coordinate multidisciplinary research that is communicable to decision makers to intervene in poor land management practices for end users both in the land and lake sectors, for which there has been little cross-over in the past. The workshop explored how an oversight framework could be established to better coordinate research to ensure impactful outcomes e.g. protect agricultural land from erosion and prevent flooding and influx of sediment to Lake Victoria that impacts the fisheries.

We were also able to develop with the stakeholders partners who wish to use the research to improve, test or monitor land and lake management practices and can facilitate this process and who will be willing to participate in international funding proposals to broaden the collaborative team and scale of research from this project funded by the Royal Society and UK Natural Environment Research Council.

# 1 Introduction

Lake Victoria is the largest of the African Great Lakes, with a surface area of ~69,000 km<sup>2</sup>. It is the world's largest tropical lake with more than 30 million people in Kenya, Tanzania, and Uganda relying on the lake's resources. Lake Victoria's ecosystem has experienced accelerating change since the 1940s and the extent and impact of anthropogenic-driven changes in a critical landscape for food security needs to be understood and managed.

This project, funded by the Royal Society, brings researchers from the BGS, University of Plymouth, University of Eldoret and Kenya Marine and Fisheries Research Institute (KMFRI) together to collaborate on a study assessing the dynamics of environmental geochemistry and health in the Winam Gulf catchment of Lake Victoria. Knowledge gaps in local processes and technical capacity were identified, requiring novel research to understand the influence of soil degradation on soil-to-crop dynamics for micronutrients essential for a healthy diet and potentially toxic elements (PTEs), the transfers from land-to-lake via sediment flows and the subsequent impact on lake ecosystem health. Emerging and past activities ranging from land clearance, overstocking (livestock/fish), use of fertilisers, road construction, mining, and poor landscape management have resulted in the land-to-lake transfer of sediments with consequences for land and aquatic productivity.

## 2 Stakeholder Workshop

### 2.1 WORKSHOP PURPOSE

This second workshop brought together land and lake management for agriculture and fisheries in the Winam Gulf catchment to design future activities to monitor and test the effectiveness of soil management to reduce soil losses and its impact on downstream water bodies. Informed by the December 2023 workshop, we aimed to inform the targeting of scarce resources for mitigation practices to the benefit of land and lake management of key resources for food security and livelihoods, with discussion about setting up a forum to span the two landscapes and multiple stakeholder interests. In addition, the workshop explored multidisciplinary research ideas for future funding proposals and provide a pathway to impact for land-lake research relating to the dynamic of Lake Victoria inputs using group exercises to explore specific research and pathway to impact questions to develop multidisciplinary projects and oversight framework.

#### 2.1.1 Project outputs to date

- Dowell, S.M., Humphrey, O.S., Isaboke, J., Blake, W.H., Osano, O., Watts, M.J. (2024). Evaluation of soil erosion rates using plutonium isotopes at agricultural sites in western Kenya, *Environmental Geochemistry and Health*, DOI : 10.1007/s10653-024-02084-2 a4a5c108-cda5-43b1-b71b-fea955f307ed
- Humphrey, O. S., Aura, C., Ongore, C., Osano, O., & Watts, M. J. (2023). Workshop on dynamics of land to lake transfers in the Winam Gulf.
- Aura, C. M., Humphrey, O. S., Marriott, A. L., Watts, M. J., Ongore, C. O., Mwamburi, J. M., ... & Coffey, T. J. (2024). Assessing the spatial distribution of elemental concentrations in surface sediments of Lake Victoria, Kenya: implications for ecological health and management. *Environmental Geochemistry and Health*, 46(4), 137.
- Dowell, S. M., Humphrey, O. S., Gowing, C. J., Barlow, T. S., Chenery, S. R., Isaboke, J., ... & Watts, M. J. (2024). Suitability of 210Pbex, 137Cs and 239+ 240Pu as soil erosion tracers in western Kenya. *Journal of Environmental Radioactivity*, 271, 107327.
- Dowell, S. M., Humphrey, O. S., Blake, W. H., Osano, O., Chenery, S., & Watts, M. J. (2023). Ultra-trace analysis of fallout plutonium isotopes in soil: emerging trends and future perspectives. *Chemistry Africa*, 6(5), 2429-2444.



- Isaboke, J., Osano, O., Humphrey, O. S., Dowell, S. M., & Watts, M. J. (2023). The nutritional quality of forage grass changes due to changing soil chemistry resulting from different land-use management in the Oroba Valley, Kenya. *African Journal of Education, Science and Technology*, 7(3), 40-54.
- Marriott, A. L., Osano, O. F., Coffey, T. J., Humphrey, O. S., Ongore, C. O., Watts, M. J., & Aura, C. M. (2023). Considerations for environmental biogeochemistry and food security for aquaculture around Lake Victoria, Kenya. *Environmental Geochemistry and Health*, 45(8), 6137-6162.
- Humphrey, O. S., Marriott, A. L., Dowell, S. M., King, D., & Watts, M. J. (2023). Dynamics of environmental geochemistry and health in a lake-wide basin: stakeholder engagement meeting URL: <https://nora.nerc.ac.uk/id/eprint/534235>
- Humphrey, O. S., Osano, O., Aura, C. M., Marriott, A. L., Dowell, S. M., Blake, W. H., & Watts, M. J. (2022). Evaluating spatio-temporal soil erosion dynamics in the Winam Gulf catchment, Kenya for enhanced decision making in the land-lake interface. *STOTEN*, 815, 151975.

## 2.2 WORKSHOP ACTIVITIES

The workshop was held on 4<sup>th</sup> June 2024 in the KMFRI Conference Hall, Kisumu Centre. P.O. Box 1881, Kisumu. Dr Chris Aura (KMFRI), Prof Odipo Osano (UoE), Dr Olivier Humphrey (BGS) and Dr Michael Watts (BGS) opened the workshop and provided the research context of the study before all participants (see Appendix 1) introducing themselves and their research backgrounds and roles in land/lake management.



Figure 1 Workshop introduction by Dr Michael Watts (BGS)

### 2.2.1 Workshop agenda

4<sup>th</sup> June 2024 – KMFRI, Kisumu

10.00 – Opening remarks and welcome

10.10 – Background information and a reminder of the purpose of the workshop

10.20 – Outcomes of the 1<sup>st</sup> workshop in December 2023.

10.30 – Explanation of group exercises and exercises 1 and 2.

11.00 – Exercise 3

12.00 – Lunch

12.45 – Exercise 3 continued

13.30 – Actions for the forum going forward to promote research coordination and connection with policy decision-makers. Volunteers to help coordinate.

14.20 – Closing remarks

14.30 – End

### **2.2.2 Workshop exercises**

The following questions were prepared to develop multidisciplinary research ideas for future funding proposals and to provide a pathway to impact for land-lake research relating to the dynamic of Lake Victoria inputs:

#### **Exercise 1**

Discuss examples of:

- (a) policy brief preparation and communication for land/lake management
- (b) examples of community engagement to change behaviour or practice.

#### **Exercise 2**

- (a) Who are the specific people/responsible persons that researchers write a policy brief for?
- (b) What should a policy brief contain?
- (c) What happens to it when passed to the correct person?

#### **Exercise 3**

Framework – how should data/research be coordinated and disseminated.

- (a) How should data or research be coordinated and disseminated? Can this working group facilitate this process- examples of good practice?
- (b) What would a working group need in terms of resources and expertise?
- (c) Could there be a process of enforcing delivery of research harmonisation- Quality improvement of data?
- (d) Can this working group facilitate this process – examples of good practice in place, other ways of communicating to policy decision makers?



Figure 2 Workshop participants contributing the group exercises

## 2.3 WORKSHOP RESPONSES

The responses to all the questions are available in Appendix 2, commentary and analysis of the responses are provided below.

### 2.3.1 Exercise 1 and 2

The first two exercises were designed as icebreakers to ensure that all the participants were engaged and to start getting the participants to consider how we can translate our research findings into impact.

*Exercise 1: Discuss examples of:*

- (a) *policy brief preparation and communication for land/lake management*
- (b) *examples of community engagement to change behaviour or practice.*

The responses to the first question can be divided into two categories: (i) preparation of the document, and (ii) examples of successful policy briefs. The preparation of a policy brief is based on research data and driven by scientific outcomes, this enables the formation of a strategic and prioritised action plan. The majority of the responses stated that policy briefs should be simple to understand for a non-technical audience, whilst being elaborate and convincing to national government so that the uptake of recommendations can be integrated into practice. Policy briefs are prepared to enforce recommendations of research findings and need to have all stakeholders engaged (end users, private sector, government, community engagement through local ward and county administrators). Specific examples of policy briefs that had been prepared by the workshop participants included (i) issues of land use for agriculture and mining; (ii) the safe drainage of irrigation water from paddy fields; and (iii) monoculture land use and mechanical soil disturbance.

The participants identified that the key to success in changing behaviour or practice was ensuring that the community was engaged through a project. Conducting trials in a community, engaging with a focus group through active communication channels, enabling citizen science and providing training are essential when ensuring that no one is left behind. Several examples of community

engagement which have led to a change in behaviour or practice included a Farmer Research Network (FRN) in West Pokot that produced a policy brief on sand harvesting. This policy has been accepted by the county government, the community-led initiative was successful due to the integration of the community in the problem-solving phase of the project, which included constructive conservation structures, training and afforestation. Further examples included the application of fertiliser and the utilisation of soil management practices (cover crop, terraces, minimal tillage).

*Exercise 2:*

- (a) Who are the specific people/responsible persons that researchers write a policy brief for?*
- (b) What should a policy brief contain?*
- (c) What happens to it when passed to the correct person?*

The workshop participants unanimously identified that in Kenya, policy briefs are written for decision-makers and officials in the county and national government who can implement the changes outlined in the briefs. However, the policy briefs should also be used by NGOs, the general public and community officials.

The group collectively identified that a policy brief should contain the following sections: title, introduction, supporting literature, a problem statement and justification, methodology, recommendations, financing and an implementation matrix. Specific details that also need to be considered include the negative implications if the problem is not addressed, practical policy recommendations and the anticipated impact of the interventions on the sector and economy.

There was a general agreement that once a policy brief is passed to the correct people appropriate action is taken and there is a change in behaviour. Following the submission of a policy brief to the relevant legislative community it will be considered and reviewed for adoption, implications, feasibility and identification of current policy gaps. A policy brief will often undergo public participation/assessment, reviewed in cabinet and a bill will be written before the recommendations are implemented. However, this positive view was not shared by all the participants and some policy briefs are simply archived and none of the recommendations are ever implemented.

### **2.3.2 Exercise 3**

*Exercise 3:*

*Framework – how should data/research be coordinated and disseminated.*

- (a) How should data or research be coordinated and disseminated? Can this working group facilitate this process- examples of good practice?*
- (b) What would a working group need in terms of resources and expertise?*
- (c) Could there be a process of enforcing delivery of research harmonisation- Quality improvement of data?*
- (d) Can this working group facilitate this process – examples of good practice in place, other ways of communicating to policy decision makers?*

There was an overwhelmingly positive response that a working group comprised of the workshop participants could facilitate the coordination and dissemination of land-to-lake research. Specifically, through policy briefs and a pioneering research/data hub that is open-access and shares all the collaborative research within the Lake Basin region. The concept of an agricultural management information system within a county was also highlighted, however, this may lead to the duplication of resources if it needs to be established for each county and a larger Lake Basin region hub would be more effective. Developing a virtual platform for sharing data is essential to build a functional framework designed to help disseminate research findings.

This could also encourage better data sharing policies to be established during the project initiation stage. Examples of good practice would be the harmonisation of data and dissemination of research protocols. Additional means of data/research coordination and dissemination could include community-driven development committees established at the ward (sub-county) level.

The workshop participants identified several resource and expertise requirements necessary for coordinating and disseminating land-to-lake basin data/research. The group itself would need to be made up of relevant stakeholders (KALRO, KEFRI, KMFRI, LBDA- lake basin development authority, agriculture/fisheries experts, NGOs, community representatives, entrepreneurs, government representatives, NEMA, universities, policymakers, etc), administrative support and a multidisciplinary executive leadership team. One of the key resources will be sufficient finances to host regular meetings (both in-person and virtually), support the cost associated with hosting a data sharing platform and translating the research into accessible formats (multi-media data sharing results, leaflets, radio, schools, mobile apps etc). It was also suggested that private policy writing consultants may also provide a level of expertise required that is currently lacking from the group. It was also identified that technical and practical training would be required to develop the capacity of relevant stakeholders, thereby ensuring the working group becomes self-sustaining.

A key factor in promoting the delivery of harmonised research and data quality improvements would be to have a regulatory body that can enforce research institutes to share data to prevent the duplication of work. They could also ensure that researchers publish data in open-access formats, that laboratories have a standard operating procedures and harmonised analytical methods. The participants also highlighted that the 'National Commission for Science, Technology and Innovation (NACOSTI)' corporation, which is the public sector agency responsible for fostering research, science, technology and innovation in Kenya could do more to administer the delivery of research in Kenya. The group suggested that NACOSTI should be responsible for sharing information with a dedicated expert responsible for research sharing and its management.

In addition to policy briefs, additional means of disseminating data should include academic publication in open-access journals, sharing results with KALRO (only appropriate for terrestrial data), translating results into local languages, and the utilisation of community volunteers to share the information outlined in policy briefs. Furthermore, the policy should be shared with the county executive committee and the county attorney which can be shared at cabinet meetings at the county level. There should be regular communication of the research findings to relevant state departments which can lead to the inclusion of research into the county integrated development plan. One of the key alternative methods of communicating to policy decision-makers was through the public. Public participation groups at the grassroots level can be useful for influencing decision-makers. The deployment of different media platforms (leaflets, SMS, radio, TV etc) has previously yielded positive results – examples mentioned from an academic who also works as a columnist and with producers in national television for topical/editorial discussion programmes.

### 3 Conclusions and Outlook

At this workshop we were able to bring together land and lake management authorities to disseminate research findings on soil erosion and sediment source apportionment in the Winam Gulf, Kenya collected over the past 4 years and discuss future opportunities and collaborations with stakeholders to inform future grant proposals and data distribution tools.

The main outputs from this workshop were understanding how policy briefs are prepared understanding how community engagement can lead to a change in behaviour or practice.

However, the key to enabling a positive change in behaviour or practice is ensuring that the community are engaged from the beginning of a project. This may include conducting local trials, engaging with focus groups or enabling citizen science and participation. Furthermore, the workshop participants were able to sense that the creation of a committee is essential to share research outputs with relevant stakeholders in the Winam Gulf basin area. By developing a virtual platform for sharing data is essential for building a functional framework designed to help disseminate research findings and create long lasting impact from research. However, this would need to be adequately resourced and supported by appropriate stakeholders and greater engagement with policymakers would be required.

In addition, we were able to identify partners who want to use the research to improve, test or monitor land and lake management practices and can facilitate this process and participate in international funding proposals to develop a multidisciplinary research framework for future funding proposals and provide a pathway to impact for land-to-lake research.

# Appendix 1

## PARTICIPANTS

List of participants attending the workshop.

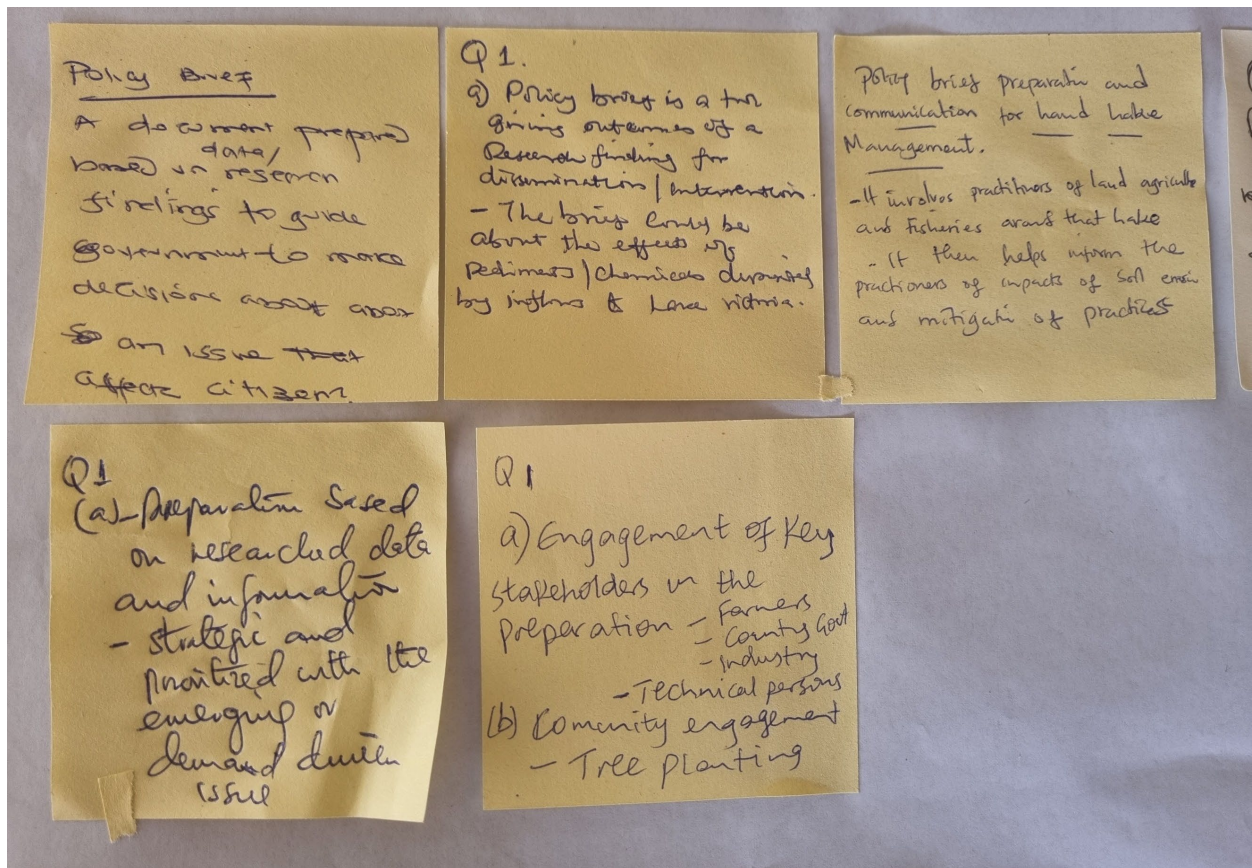
<b>Name</b>	<b>Organization</b>	<b>Title</b>
Odipo Osano	University of Eldoret	Associate Professor
Ruth Njoroge	University of Eldoret	Lecturer
Abigael Otinga	University of Eldoret	Lecturer
Everline Achieng	Ministry of Agriculture and Livestock and Fisheries-Migori County	Crops Officer
Samson Kidea	State Department of Blue Economy and Fisheries (SDBEF)	Regional Coordinator
Ndaga Ogola	Ministry of Agriculture and Livestock and Fisheries-Migori County	Directors Office
Susan C. Adhiambo	County Government of Kisumu	County Director of Fisheries
Stephen Oketch	CGS- Department of Agriculture- Siaya	M&EO
Lucy Caroline Atieno	State Department for Blue Economy and Fisheries Department	SDBEFO
Michael Omolo	County Government of Homabay	Director Extension Services
Zakayo Gombe	South Nyanza Sugar Company	Research and Development Manager
Mercy Ngunjiri	International Fertilizer Development Center (IFDC) Kenya	Soil Scientist
Flora Musanga	Extension/Agriculture	Agricultural Officer-ADA
Jessica Kahura	National Environment Management Authority (NEMA)	Senior Environmental Officer
Dominic Mutambu	Alliance of Biodiversity and CIAT	Researcher
Stephen Kimani	Kenya Agricultural and Livestock Research Organization (KALRO)	Soil Scientist
Safina Musa	Kenya Marine and Fisheries Research Institute	Research Scientist
Tom Guda	Kenya National BMU Network	National Chairman
Collins Ongore	Kenya Marine and Fisheries Research Institute	Research Scientist
Christopher Aura	Kenya Marine and Fisheries Research Institute	Director
Stella Kamwasir	National Environment Management Authority (NEMA)	Regional Director
Roy Okoth	Agribiz	Director
Okech Kendo	Edu Health	Director
Keziah Wairimu Ndungu	Kenya Agricultural and Livestock Research Organization (KALRO)	Director

Mary Koech	Kenya Agricultural and Livestock Research Organization (KALRO)	Researcher
Patrick O. Orwa	State Department of Blue Economy and Fisheries (SDBEF)	Assistant Director
Mary A. Ongadi	County Government of Kisumu	SCCD
Chrisphine Nyamweya	Kenya Marine and Fisheries Research Institute	AD Research Scientist
Venny Mziri	Kenya Marine and Fisheries Research Institute	CD Research Scientist

## Appendix 2

### QUESTION 1 A RESPONSES

Discuss examples of policy brief preparation and communication for land/lake management





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Q1.  
Policy briefs are prepared to execute recommendations of research findings and state of the environment reports where the interventions are required.

Q1(a)  
(i) Preparation & Commitment  
(i) It is mainly specific to given crop/topic  
(ii) It provide smart simple brief on the trends and comparisons  
(iii) It is mainly communicated through the County management

Q1. Policy brief preparation  
Needs to have all stakeholders engaged - e.g. End users, Private sector, Government  
Community Engagement: Local population, Ward administrators, County Admin & Private sector

Q1 Policy brief preparation  
- Should be simple to understand to a non-technical audience  
- Should be elaborate + convincing to national governments so that they can easily understand and integrate it into their systems.

Q1  
- policy brief is summary of findings and recommendations of research

Q1  
(a) - Analysis of data  
- Distilling findings to key issues  
- Brief context/situation analysis  
- Policy implications  
- Responsible parties

hin

Q1 (a)  
Policy brief communication of and take  
Should use simple language  
1) Data to support  
11) Should be short - 1-2 pages

Process;  
(1) Identification of a problem to inform the development of a policy.  
(2) Stakeholder engagement.  
(3) Development of the policy.  
(4) Validation (3) implementation

Director brief to the CO and CEE  
- Cabinet Memo to CEE  
- Approval or rejection by cabinet after discussion

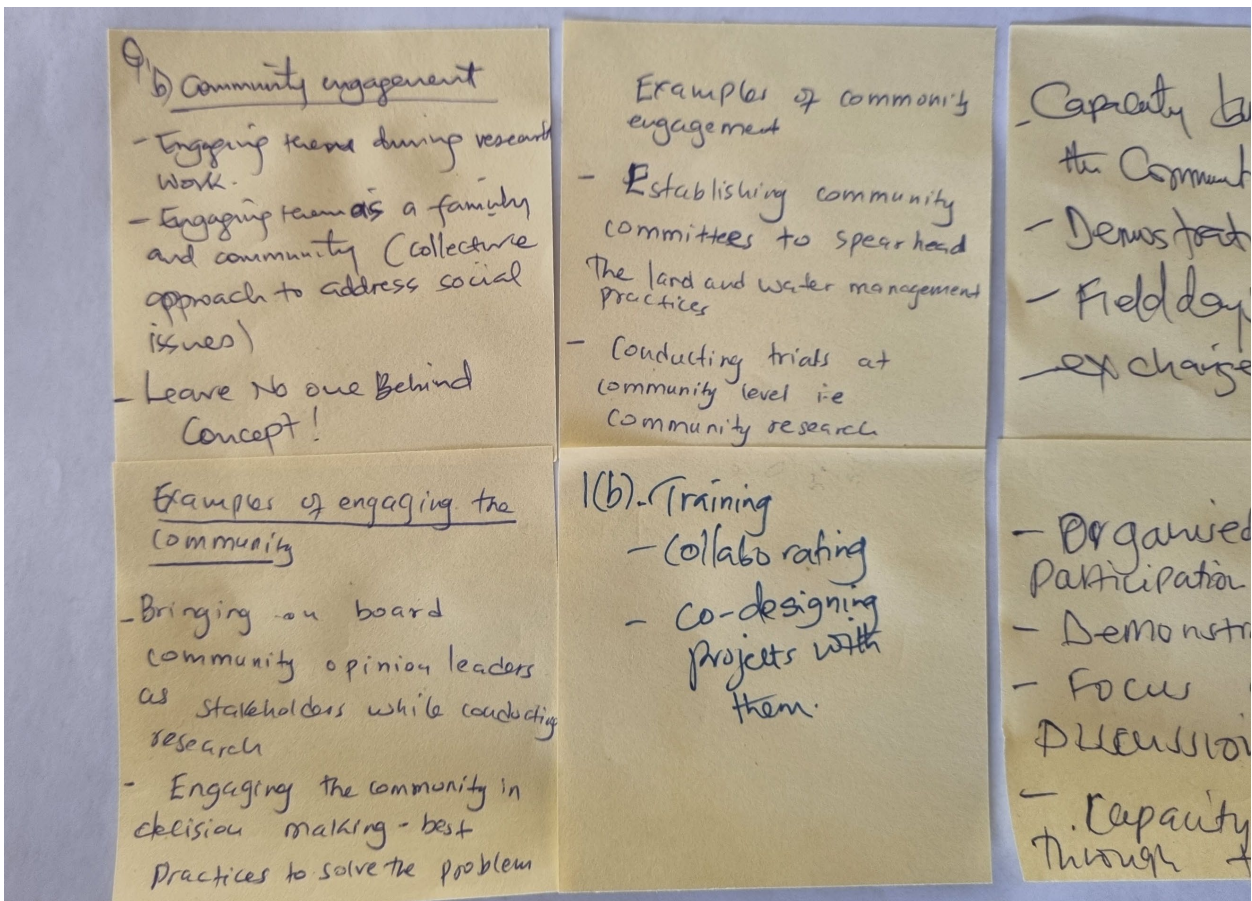
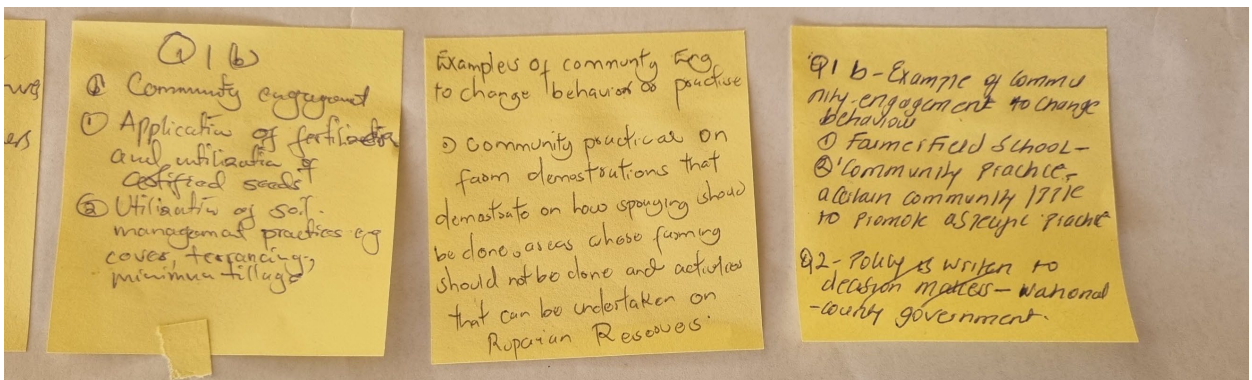
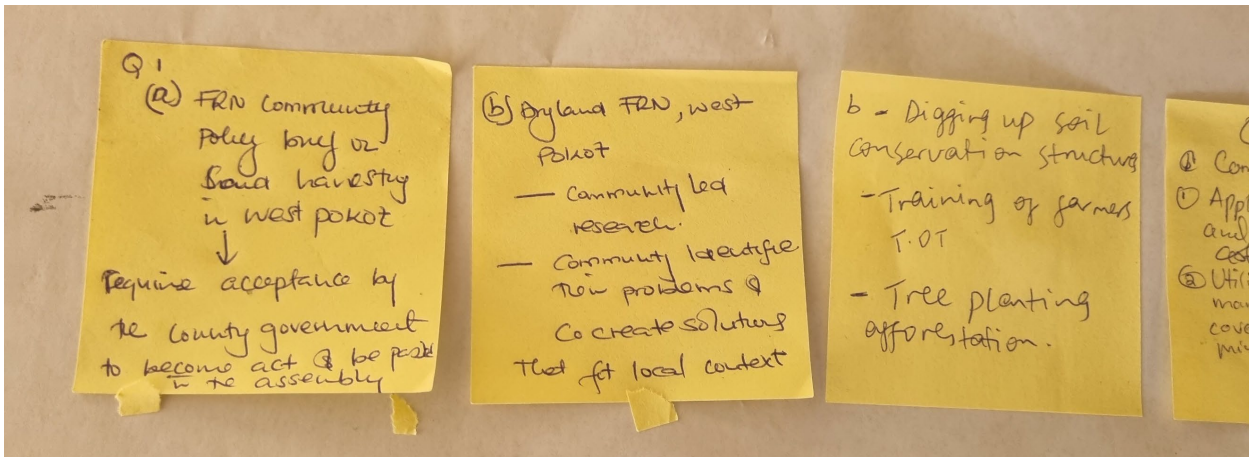
Q1

→ Example of Risk Based

- Use of land use for agriculture and mining
- Safe drainage of irrigated water from paddy fields.
- monoculture and use of mechanical soil disturbance machine
-

**QUESTION 1 B RESPONSES**

Discuss examples of examples of community engagement to change behaviour or practice.



- Capacity building of the community.  
 - Demonstration  
 - Field days  
 - Exchange tours

(b) Community engagement  
 - Engaging them in the identification of the problems from the ground.  
 - Community workshops during project implementation having inception and validation workshops.

(b) Community could include:  
 - Barazas (community meetings at local level)  
 - Form youth to address the issues

- Organized public participation sessions  
 - Demonstrations  
 - Focus group discussions  
 - Capacity building through trainings

(b) Citizen science approach  
 - Stakeholder involvement and consultation.  
 - Awareness creation.  
 - People centered interventions

(b) Community  
 - Presentation  
 - Use language of the people  
 - Inclusive citizen science

(b) Community engagement could include:-  
 - Barazas (community meetings at local level).  
 - Form youth programs to address the specific issues

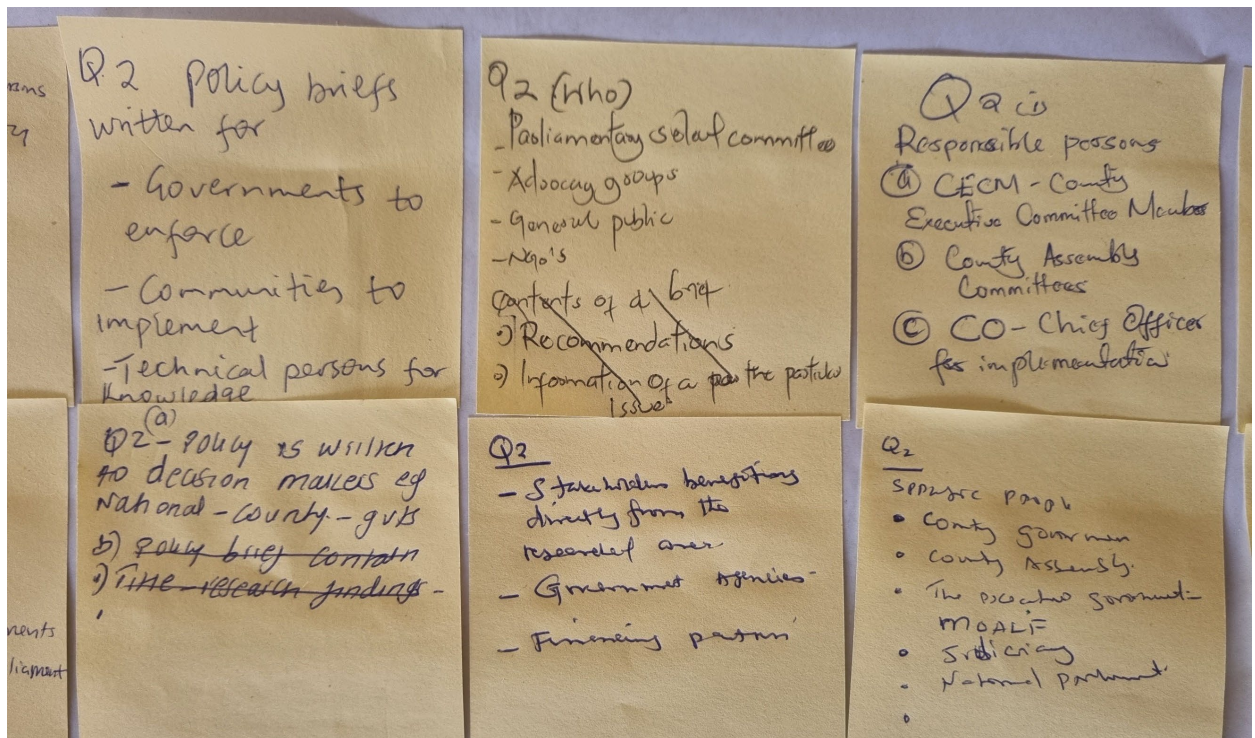
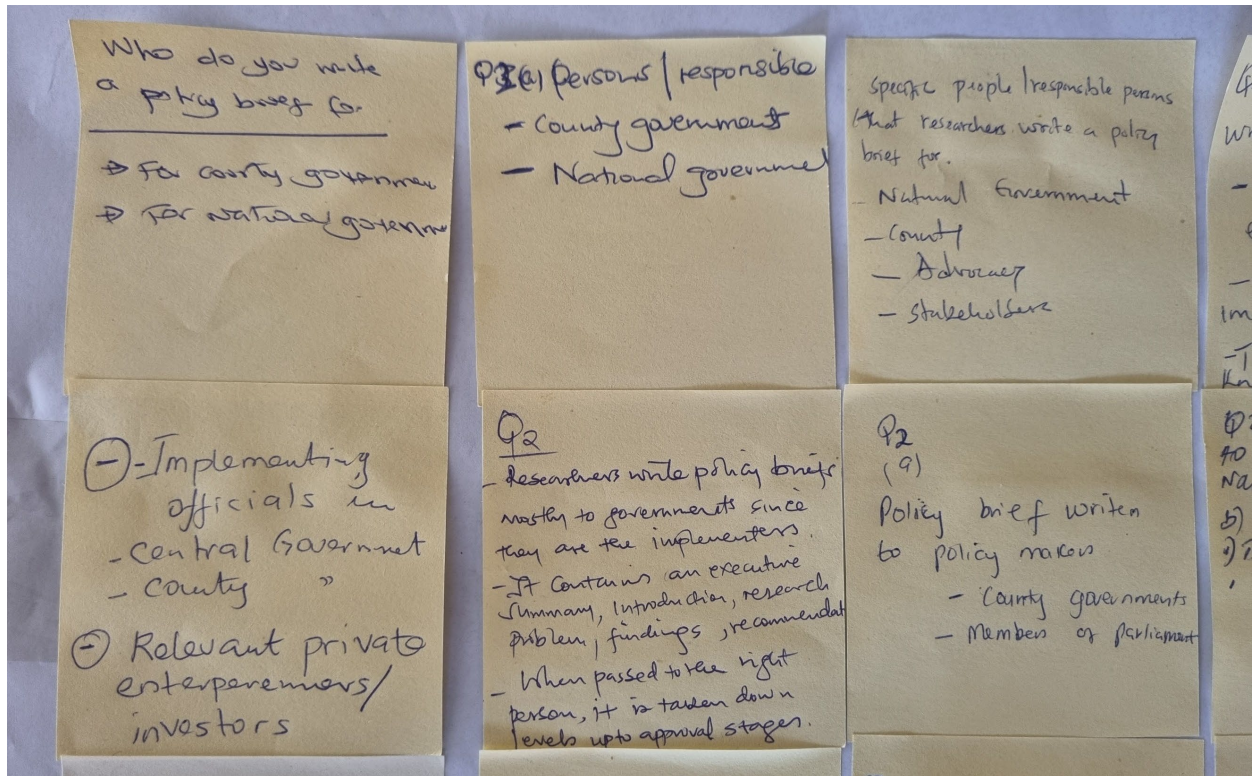
(1) Community Engagement  
 - Group meetings within the community  
 - Community meetings with county officials - Administration  
 - Community Group charts.

Roy  
 Question 1 b.  
 (2) County public participation in distribution of public resources.

(b) Community form  
 - Presentation  
 - Use language of the people  
 - Inclusive citizen science

**QUESTION 2 A RESPONSES**

Who are the specific people/responsible persons that researchers write a policy brief for?



Possible persons  
 CEM - County Executive Committee Members  
 County Assembly Committees  
 CO - Chief Officers  
 is implementation

- Q2 - National governments
- Local governments
  - Community groups
  - Donor organizations

sc people  
 ty government  
 ty Assembly  
 Executive Government  
 OALF  
 Ministry  
 Council Parliament

Q2  
 - It may be for general audience of specific group of Parliamentary Select Committee, NGO, etc

- officials in  
 - Central Government  
 - County "
- (i) Relevant private entrepreneurs/investors

mostly to governments since they are the implementers  
 - It contains an executive Summary, Introduction, research problem, findings, recommendations  
 - When passed to the right person, it is taken down in levels upto approval stages.

Policy brief written to policy makers  
 - County governments  
 - Members of Parliament

b) Pol  
 i) Title

Q2  
 The policy briefs are submitted to the line ministries (relevant) PS who works with advocacy groups to formulate legislation through parliament

Implementers -  
 County Government for National Government or Partners in development

Q2 (i) - Managers  
 - Policy makers  
 - Politicians  
 - leaders  
 (ii) - Partisan language  
 - Policy findings  
 - Clear policy recommendations

- Pa  
 - De  
 - co

1) ~~THE~~ ~~Research~~ ~~findings~~ -

- Government agencies
- Financing partners

- The executive board: MOALF
- Strategy
- National parliament

- politicians
- Development partners
- community opinion leaders

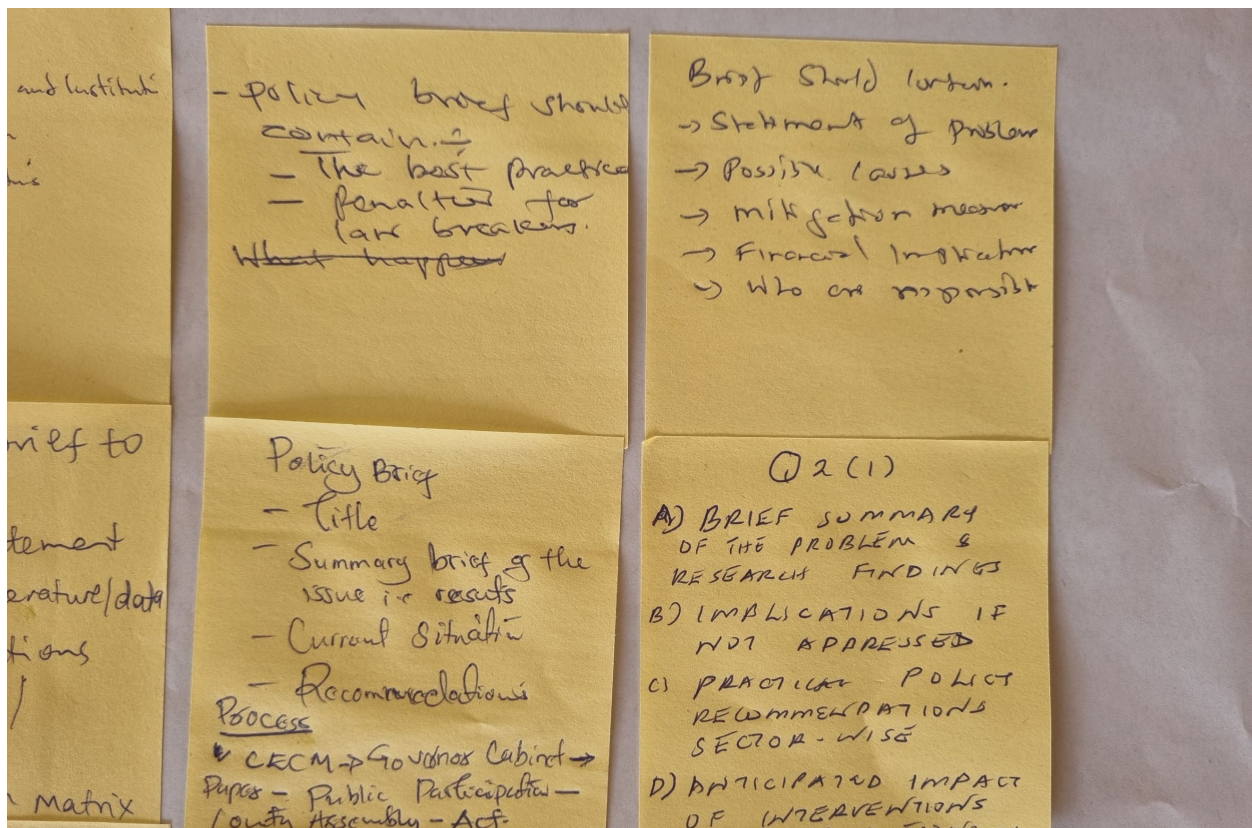
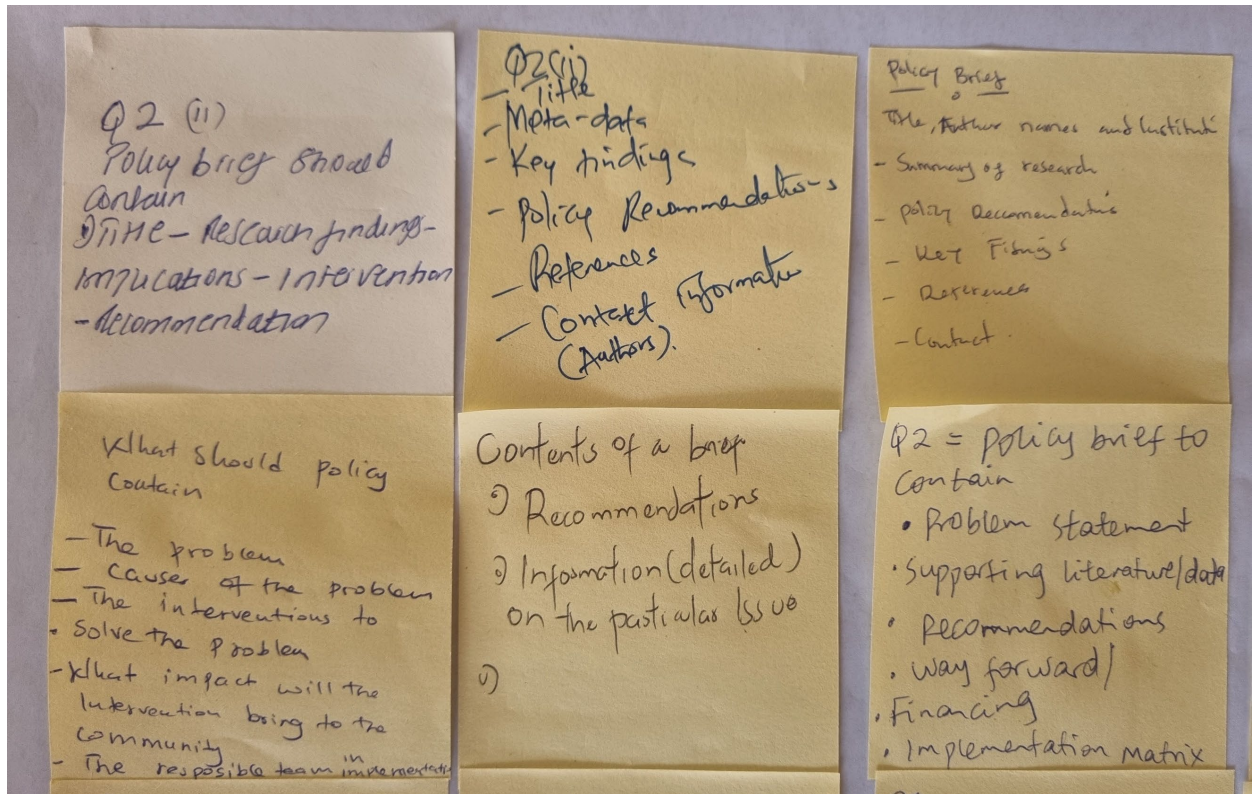
Q2

- Heads of institutions
- Principal Secretary
- Cabinet Secretary
- County government

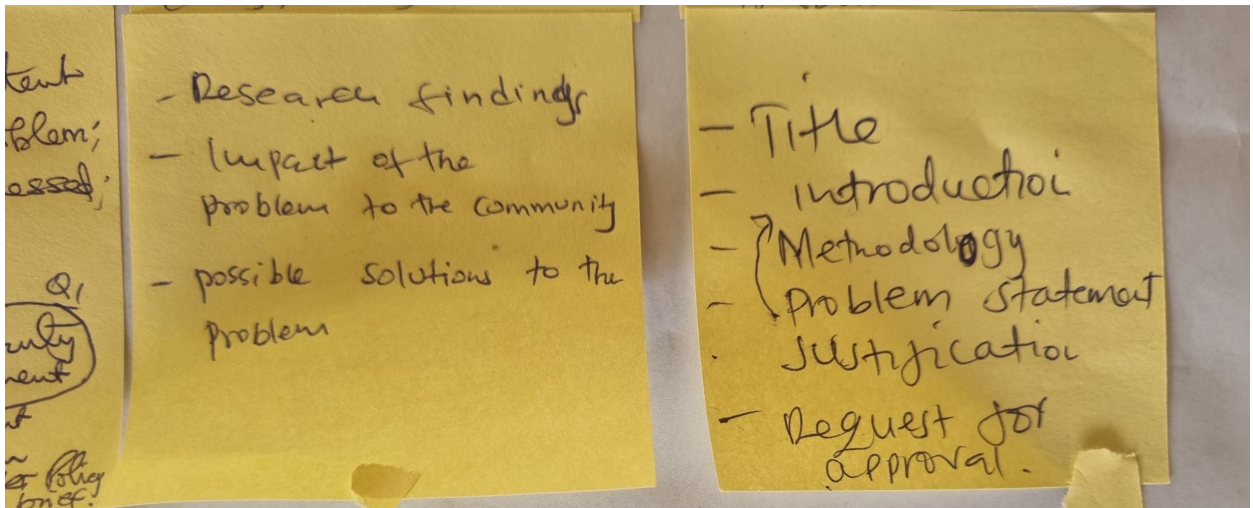
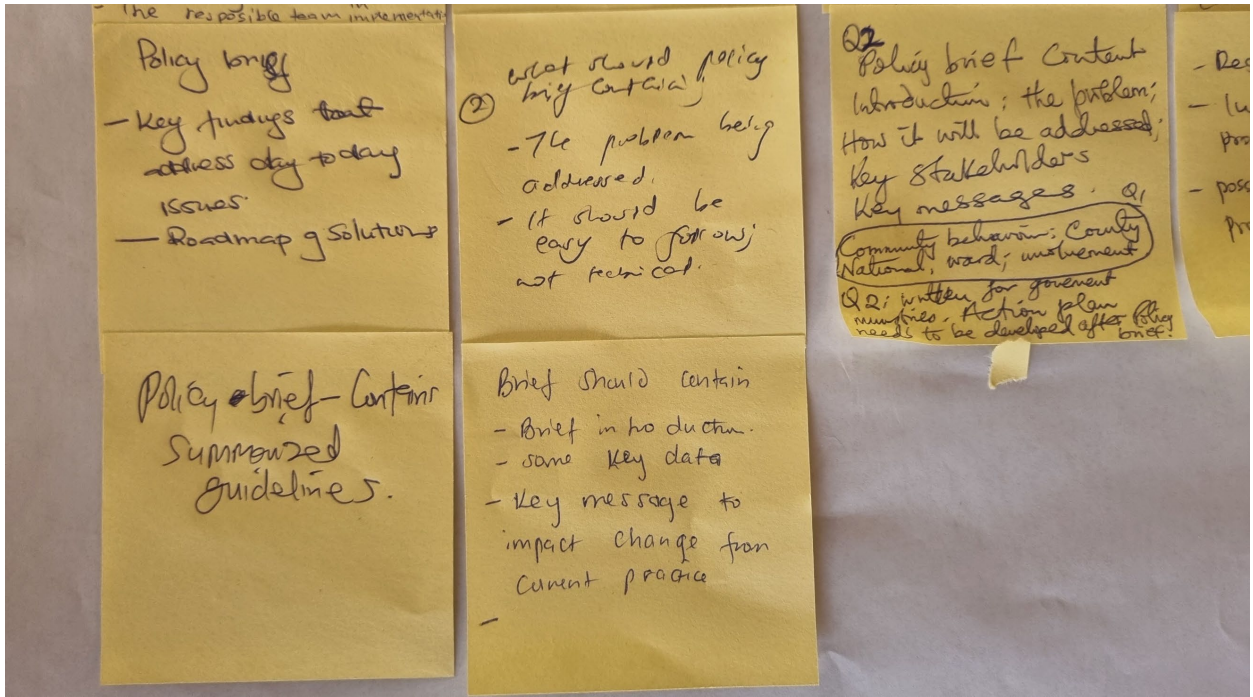
- Community members
- Government officials
- Development workers

**QUESTION 2 B RESPONSES**

What should a policy brief contain?







**QUESTION 2 C RESPONSES**

What happens to it when passed to the correct person?

AFTER SUBMISSION OF POLICY BRIEF TO THE LEAD MINISTER, IF CONSIDERED, IT WILL BE SUBMITTED TO THE RELEVANT LEGISLATIVE COMMITTEE FOR FURTHER CONSIDERATION & REVIEW FOR RELEVANCE, APPLICABILITY, FEASIBILITY, IDENTIFICATION OF POLICY GAPS

THE COMMITTEES WORK IN COUNTY ASSEMBLIES OR NATIONAL ASSEMBLY. IF GAPS EXIST, & NO RELEVANT LAW OR REGULATION, THEN IT IS TABLED FOR PREPARATION OF APPLICABLE COUNTY OR NATIONAL BILL.

Q2  
Policy brief passed to write person

i) It goes through implementation process for enactment

CECM - Governor Cabinet brief  
- Public Participation  
County Assembly for hearings  
- Development of a bill for enactment

When passed to write person

① Public participation  
- Cabinet  
- Bill is written  
- Can be passed on law  
- Implementation

② Executive order done  
- Implementation

Researcher  
↓  
DALRO, Fisheries + MPFI  
↓  
Min. of Ag. (develops action points and approves)  
↓  
County officials  
↓  
Wards (implemented at Ward level)  
↓  
Community engagement

- A passed policy is implemented by various stakeholders up-down model or down-up model.

Policy to correct person

- Resources for implementation are provided for
- Plans for mitigation is done.
- Implementation is quicker and not a lot of cost.

Policy Recommendations mainstreamed to government policies/programs.

1) change of behavior  
2) Funding for implementation of the policy Recommendations

Appropriate action is taken.

Considered for funding (implementable)

Q2 - When passed to correct person

- Has impact
- Gets implemented well
- Is understood.

- Appropriate interventions are applied to solve the problem at hand

- The community benefits

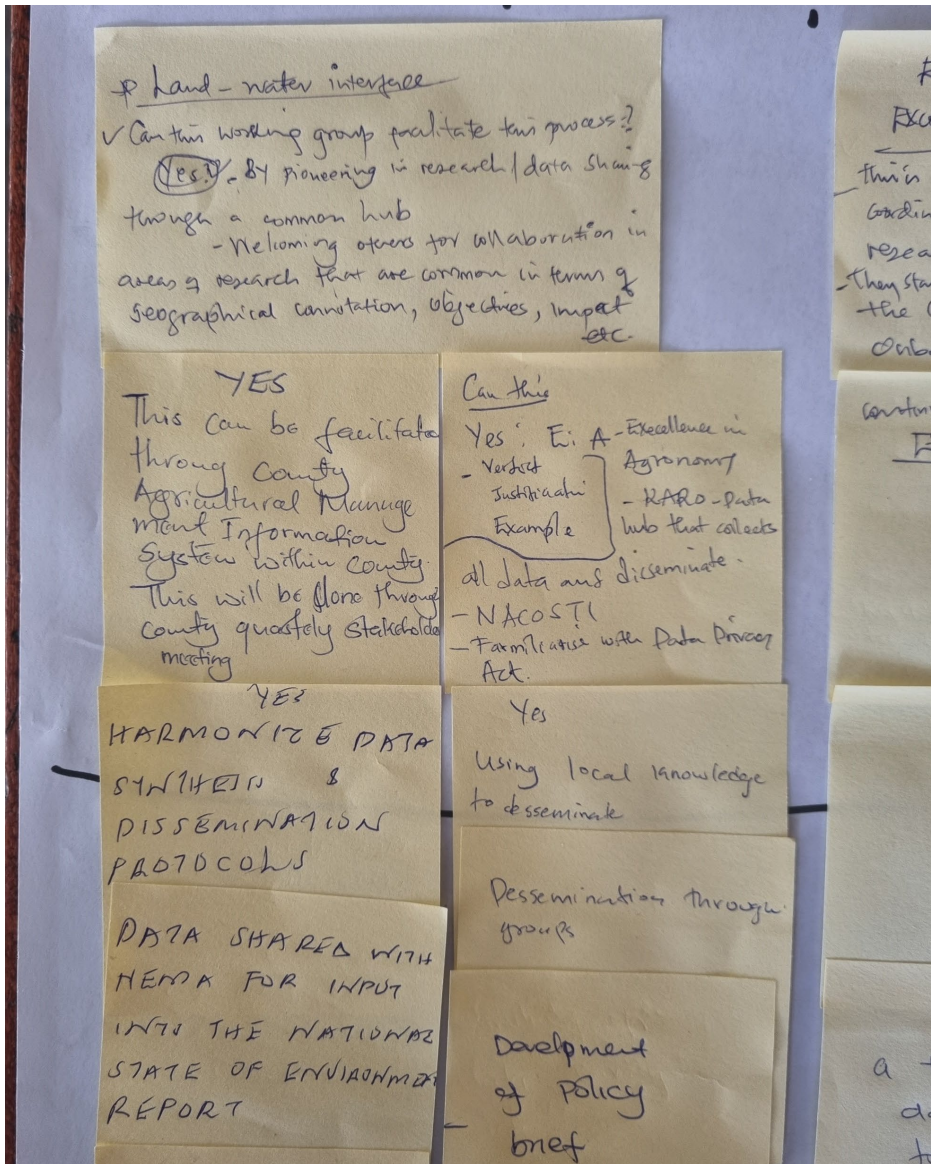
Q2 - What happens to policy when it's passed to the correct person

- Public participation - County
- Policy makers
- Cabinet Ministry of Agric
- Cabinet
- Bill → Law - implementation

- It is archived.
- Rarely are policy recommendations implemented.

**QUESTION 3 A RESPONSES**

How should data or research be coordinated and disseminated? Can this working group facilitate this process- examples of good practice?



Yes

- Harmonizing data protocol.
- KARO - Big data system - bring all data to gether

- Frameworks / Plans / Strategy

- Public Barazas
- Social media for public
- Mainstream media i.e. Youtube, local media stations -
- Capacity Building

SHARING DATA THROUGH PROPOSED  
SECTOR REPORTS  
FACT SHEETS  
POLICY BRIEFS  
PROTOCOLS  
FRAMEWORKS  
STRATEGIES, PLANS  
PUBLICATIONS

POLICY BRIEF  
SHARED WITH  
COUNTRIES FOR  
INPUT INTO THE  
COUNTY INTEGRATED  
DEVELOPMENT PLAN  
& COUNTY ENVIRONMENTAL  
ACTION PLANS

Example is:

Excellence in Agronomy (EIA)

This is an initiative by CGIAR centers to coordinate and disseminate agronomy & soils research.

They started first by coordinating within the CGIAR centers then are now onboarding other organisations like IFDC, KARO

continued - Excellence in Agronomy

EIA Meet on monthly basis.

- Share skills b/w and among partners.
- Share projects they are working on.
- Share on how to collaborate to avoid duplication

Special platform  
for mass media  
Eg <sup>FM</sup> radio  
stations

There should be  
a time frame in which  
data can be moved  
to the clearing house —  
Immediately after research  
is completed.

4 steps

Researcher



Institution



Clearing Hse Eg Regulatory  
Hse



Organised End user

Centres of Excellence  
at institutions.

Community  
Driven Development  
Committees at  
the ward level  
can be useful  
tool for ~~data~~ ~~info~~  
sharing

yes - has multiple  
stakeholders  
⇒ ~~Examples~~  
- National Government  
State Departments  
Coordination Committee

Developing ~~code~~ of  
conduct on data  
sharing

- yes  
- sharing of info  
example  
- stakeholder  
forum (conty)  
(Case Com)

Engaging in demand  
driven research  
- Needs assessment  
- community participation  
- using the end users to  
be trainers (TOT)

Data sharing policy  
should be ~~institutionalised~~  
in ~~institutionalised~~  
during project  
formulation.

Data sharing  
forums:  
+ YouTube.  
- Facebook.  
- Twitter

- capacity building  
on data sharing

- You do Research to be  
Used.

Simple Extension  
Material Eg Prochro



### QUESTION 3 B RESPONSES

What would a working group need in terms of resources and expertise?

**Stakeholder meetings**

- KALRO
- Agriculture
- Fisheries
- NGOs
- community representative
- entrepreneurs
- former organisations
- Government rep  
- NEMA

KEFRI  
KALRO  
KNFRI  
\*LBDA Lake basin development authority  
LAKE REGIONAL  
Economic BLOCK

- University → researchers
- Public administrators
- M&E monitoring + evaluation
- National + county lawmakers  
o relevant bodies
- county administrator

~~Capacity building~~  
- Universities  
- Religious groups  
- Faith Based organisations

**Policy writing consultants**

- Private (higher costs, more effective)

State department

**Finances**

- meetings
- admin
- Regular contact
- cost in sharing data
- provide time for researchers

**Hybrid meeting (quarterly)**

- physical (higher cost)
- online (lower cost)

at authority  
✓  
L20

Invite parliamentary group  
to a workshop retreat  
explain results + policy  
guidelines

PS  
Banks

Invite County  
Assembly group  
to W/shops  
To understand  
policy issues

Technical + practical  
↓  
Training + capacity building  
for relevant stakeholders  
(government)  
sustainability

## Extension Services

to translate policy to  
popular version  
→ Accessible.

## Multi media

- Demonstration
- paper booklet (local language)
- media (radio - TV)
- Schools / churches
- mobile app
- Farmer business school

- Social gatherings

- public communication channels

Information platform data

hosted locally &

sustainable

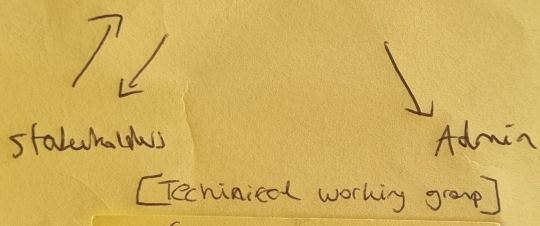
- High priority

↓  
high cost

## Open access costs

Data for Kenya → in Kenya  
for researchers for specialists.

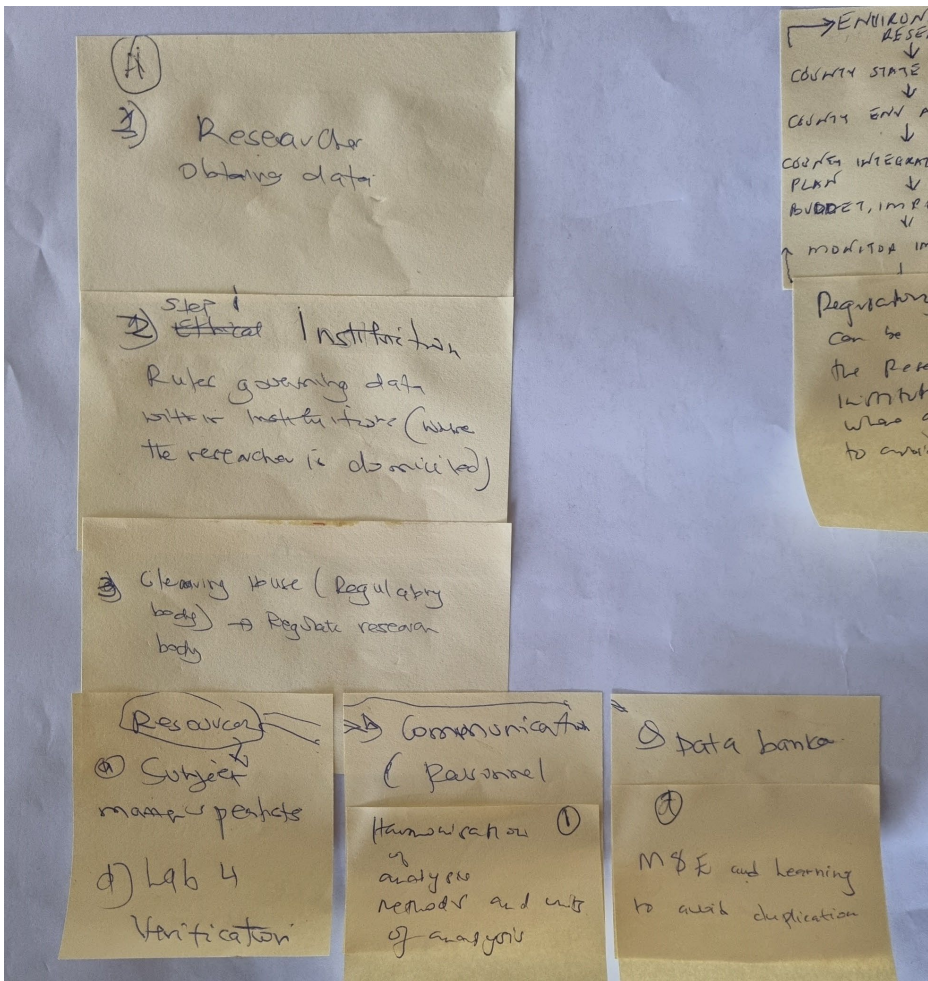
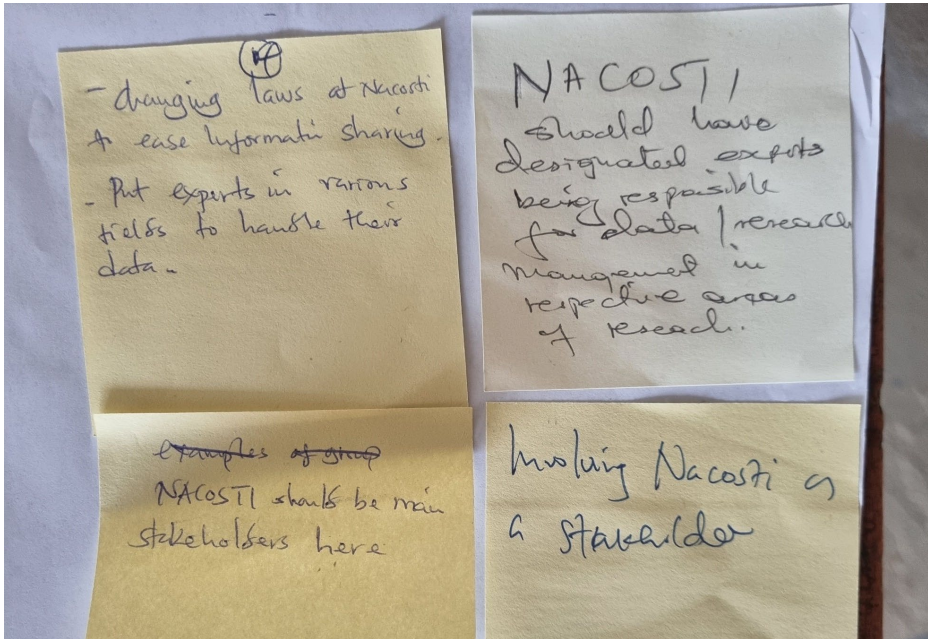
Multi-disciplinary  
Executive Leadership



- WORKING GROUP STRUCTURE
- TOR TIME
- SPATIAL SCOPE
- PROJECT-BASED WORKING GROUP WITH A RESULTS-BASED FRAMEWORK
- WORKING GROUP OBJECTIVES

**QUESTION 3 C RESPONSES**

Could there be a process of enforcing delivery of research harmonisation- Quality improvement of data?



Organized

④ VSTAR (farmers) students, Groups, Ego, Policy makers

⑤ Data regulation; permits fees Laid down conditions x repercussions for misuse

⑥ sensitization of all stakeholders (firms, etc) of the available data.

- ISCOM
- Go through county
- JASCOM
- Align the existing systems to create examples

→ ENVIRONMENT RESEARCH

↓

COUNTY STATE OF ENVIRONMENT

↓

COUNTY ENVIRONMENTAL ACTION PLAN

↓

COUNTY INTEGRATED DEVELOPMENT PLAN

↓

BUDGET, IMPLEMENTATION

↓

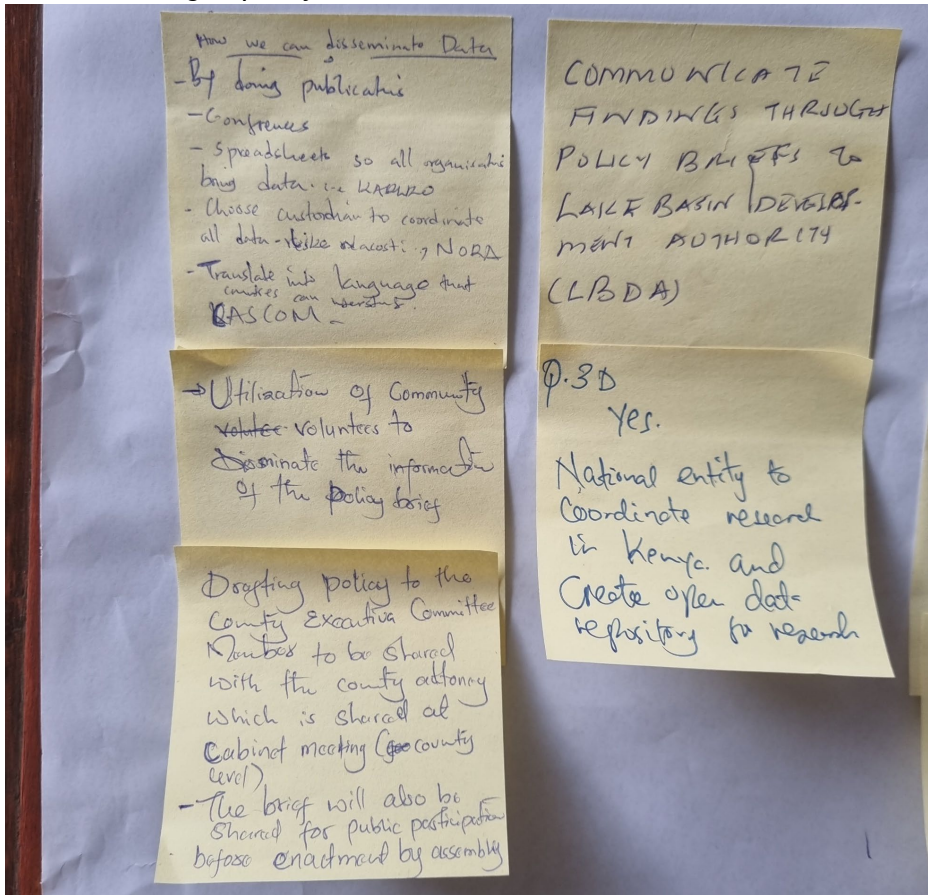
MONITORING IMPLEMENTATION

③ Alignment of existing systems (systems are there but are they working)

Regulatory body can be informing the Research Institutes of where gaps exist to avoid duplication

### QUESTION 3 D RESPONSES

Can this working group facilitate this process – examples of good practice in place, other ways of communicating to policy decision makers?



2  
RUBIN  
to  
174

→ Regular communication of research findings to relevant state departments for policy formulation.  
→ proposal of draft policy statements to state departments for consideration

to  
search  
D  
to  
search

Regional Community lobby groups as  
→ Lake Region Agriculture Association (LRAA) doing a joint communication to revise the Fisheries Act of 2016.

- County Integrated Development Plan
- Every 5 yrs.
- Organizing launching ceremonies

Organising public participations groups at grassroot, Ward level, County level, National level.

Through CASS can all data should be shared.

Different media platforms  
- fliers / leaflets  
- bulk SMS  
- Radio, TV eg I cow, digi cow

Community practice  
Eg  
Dammig dry gulleys in Hamabay.



Use of ~~PLSO~~  
Use of <sup>open</sup> public  
platforms E.g  
Funerals, churches,  
Schools

Stakeholder  
forum.

Lead / outstanding /  
model / opinion leaders  
farmers

open days for farmers or  
field days for  
dissemination

Use of Art E.g  
Drama Festivals

E.g  
Climate change  
Adaptation clubs in schools

Creating a comprehensive repository for  
data/information (Hub)

Eg. Excellence in Agronomy by the  
CGIAR centers → Harmonized and  
collected agronomy data for CGIAR centers  
and we now onboardings other orgs. like  
JHDC, HALCO etc.

→ A data Research Hub

Applications  
in ICT

Simplified ICT

Relevant Extension  
authorities to get  
relevant data  
(public extension offices)

More information to  
be disseminated through  
leaflets to farmers

- Ward based  
Community Development  
Committees
- Local Radio Stations  
targeting farmers

Enforcing the  
actions through the  
County assemblies &  
provincial admin

Social Services  
department

Lake basin development

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